

From: [Volpone, Michael A](#)
To: caisdrmp@ca.blm.gov
Subject: Outdoor Enthusiasts Opinion
Date: 08/02/2010 05:54 PM
Importance: High
Attachments: [Stemmin42p10080216230.pdf](#)

BLM

Erin Dreyfuss

As an outdoor enthusiasts it has been dis-hearting to see the closure of certain parts of the ISDRA due to the PMV over the last many of years. I have attached information conducted by an author Dr. Phillips, BLM studies too that pertain to the the study of the PMV in an open OHV area. This study, which is peer reviewed is sound and is a real indication of what is really happening in the ISDRA in regards to the PMV growth. This data should be considered by the BLM land use policy makers in opening much of the closed CH to OHV at this point. I have highlighted the critical information and attached a addendum comments to the 2010 ISDRA DRAMP graph for your reference. In closing, per the studies - the majority of the CH closed to OHV is not justifiable to based upon the current review of the area.

Thanks for taking my comments.

Michael Volpone

39580 Glenwood Ct

Murrieta CA 92563



Please consider the Environment before printing this email

----- Message from <temmin42p@av.abbott.com> on Mon, 2 Aug 2010 17:23:46 -0700 -----

To: "Volpone, Michael A" <michael.volpone@av.abbott.com>
Subject: Message from temmin42p

From: [Gil](#)
To: caisdrmp@ca.blm.gov
Subject: Concerned Family
Date: 07/31/2010 05:54 AM

Below is information that I would not normally have, I however did find some very knowledgeable individuals and used their skills.

This is an area that is frequently used by my family each year for a very long time. Then as time has passed each year a little more restrictions are placed, a little less riding area. I will admit that there are individuals that bring a negative light to our sport and education over the years has helped to lower this mindset of a few as well as more enforcement. The closure of such a recreation spot would be horrendous in regards to off roaders and people who depend on that area for income.

I would hope that all information is being reviewed, that all sides are being allowed to use information as a tool. I would also hope that this is a fair decision and that political, social, and industrial influences are not the main consideration.

Thank you Gil Tapia

1. The DRAMP is fraught with superficial and incomplete data.

BLM has chosen to ignore the work of Dr. Art Phillips III. His work is comprised of a large body of published information and data regarding the distribution and ecology of the PMV. This is peer-reviewed science. More importantly, his studies were conducted in areas open to OHV operations that document PMV and OHVs can co-exist. This omission renders many of the DRAMP recommendations invalid.

Following are the references to the seven reports. These were sent annually to BLM in El Centro and FWS in Carlsbad, as well as other agencies. It is my understanding that ASA has recently sent electronic copies to BLM in case hard copies are missing from files.

Phillips, A. M., III, D. J. Kennedy, and M. Cross. 2001. Biology, distribution, and abundance of Peirson's milkvetch and other special status plants of the Algodones Dunes, California. Report submitted by Thomas Olsen Associates, Inc. to the American Sand Association. 29 p. ("TOA 2001")

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American Sand Association.

2. Peirson's Milk Vetch (PMV) Critical Habitat (CH) should remain open to OHV activities.

There is no legal requirement to close CH.

Closure has not been scientifically proven necessary for the plant's survival. The best available science indicates that PMV colonies do well in the presence of OHV activity. Moreover, contrary to many opinions, OHVs are not the greatest threat to the PMV.

In a study performed by the BLM entitled, "2005 Monitoring of Peirson's Milkvetch in the Algodones Dunes, Imperial County, California", scientific evidence is quite the opposite. Page 24 states, "Dunes-wide, an estimated 8,113 plants, representing 0.44% of the total estimated plants, showed signs of impact from OHVs." Page 25 states, "Dunes-wide, an estimated 81,174 plants, representing 4.43% of the total estimated plants, showed signs of damage from sources other than OHVs." Basic math shows that the impact from OHVs are only 1/10 that of natural impacts which are in themselves insignificant.

The same report indicates that there were 1.8 million plants in 2005. Page 25 states, "The 2004-2005 growing season was very favorable for the germination and establishment of *Astragalus magdalenae* var. *peirsonii* and was likely the best growing season for the species since the 1997-1998 growing season. Rains beginning in October 2004 resulted in a significant germination event and an estimated 1,831,076 plants occupied the Dunes in spring 2005. Of this total, 1,369,482 plants (75%) were flowering or past-flowering at the time of monitoring. Only 21,777 (1.6%) of these plants were more than a year old. Thus, 98.4% of the 2005 plants represented a 2004-2005 growing season cohort. This supports previous contentions that this species functions more like an annual than a perennial and that the majority of seeds in the seed bank are produced from current year plants in good rainfall years." The report shows that PMV numbers are influenced by rainfall more than anything.

The results of the above study confirm those of an earlier study performed by Thomas Olsen & Associates in 2001 where less than 1% of PMV were affected by OHVs. It is important to note that the TOA study was performed exclusively in areas open to OHVs. Thus the <1% is a true figure for open areas and cannot be construed as being higher because no closed areas were included.

Additionally, page 30 of the report entitled, "Monitoring of Special Status Plants in the Algodones Dunes, Imperial County, California 1977, 1998, 1999, and 2000" by John Willoughby, State Botanist, Bureau of Land Management (BLM), California State Office states, "The response of *Astragalus magdalenae* var. *peirsonii*, a short-lived perennial, is closely tied to precipitation. It was most abundant in 1998, the highest rainfall year, and least abundant in 2000, the lowest rainfall year. Responses of this species were similar in both the closed and open areas across all four years of monitoring. Healthy populations of all three species remain in the open area, though the above-ground expression of populations of Peirson's milk-vetch fluctuates dramatically with precipitation. There is no evidence of any OHV effect on either Peirson's milk-vetch or Algodones Dunes sunflower. An increase in sand food in the open area between 2001 and 2002 may result from a release in pressure from OHV use in the interim closures, but this is inconclusive and may be at least partially an artifact of sampling.

. This indicates that there has been little change in Peirson's milk-vetch abundance and distribution in the open area relative to the closed area since

1977. Changes in year-to-year abundance are related primarily to weather in both the open and closed areas."

In some instances (probably due to rainfall), the PMV will actually do better in open areas than in closed areas as noted on page 22 of Monitoring of Special Status Plants in the Algodones Dunes, Imperial County, California 1977, 1998, 1999, and 2000

"Rainfall in 1998 was much more favorable to the species, resulting in higher abundance class values in the open area than in the closed area. This disparity also existed in 1999, but was smaller. This may mean that the southern dunes have more favorable habitat for ASMAP, but the reverse pattern observed in 1977 argues against this hypothesis. It is possible that more precipitation fell in the southern part of the dunes in 1998 and 1999 than in the northern part. There is some evidence for such a trend from RAWS data collected between November 16, 2000 and March 16, 2001: 1.40 inches of precipitation were recorded at Cahuilla in the northwest part of the dunes and 2.67 inches were recorded at Buttercup in the southern part of the dunes. The higher abundance class values in the closed area in 1977 may have resulted from higher rainfall in the northern dunes during that year. In any event, differences between open and closed areas were not great in any year and, as previously stated, ASMAP responded similarly in both areas over the four years."

All studies indicate that PMV numbers are predominately the result of rainfall and are not significantly influenced by whether the area is closed to OHV operation or not.

Based on the foregoing, there is no valid reason, scientific or otherwise, to close the PMV CH to OHV operation. No purpose is served by PMV CH closure.

If FWS must have CH closure, I suggest that it be only in years where an explosive germination even is underway and there is every expectation that the crop will flower and produce seed as in 2005. This does not directly tie a closure to rainfall where the exact amount required for explosive germination is unknown. Other years, the closure can be advisory in nature where vehicles are allowed to enter and education plays a major role.

Visitors can be instructed to see and avoid all vegetation to the best of their ability. Adverse modification should not be a concern as dune vehicles are designed to float on top of the sand and the tracks disappear in minutes in a strong wind. A single strong windstorm is known to deflate the dunes several feet and move thousands of tons of sand. This is much more than what all ISDRA OHV visitors can do in a whole season.

OHV use in the low swales, where the PMV grows, is not where OHV riders prefer to operate their vehicles (see attached photo). Riders select the tops of ridges where it is smooth and there is no vegetation to damage thin tires. As stated in the reports above, this is the reason that PMV, and other dune vegetation, can co-exist with OHVs.

While many OHV enabled ISDRA visitors wishing a quiet experience full of solitude would take advantage of the deep dunes, it is doubtful large numbers as seen at the major hills on holiday weekends will enter much of the CH. Today's equipment uses more fuel, is heavier, and thus presents many challenges when venturing too far from camp. Towing long distances is problematic as is running out of fuel. There are no popular gathering spots deep in the dunes and the sand is of finer grain making it too soft for a good ride. In addition, there are no large bowls or long stretches where the roller coaster effect can be achieved.

Continued monitoring would be used to validate this strategy.

3. Dune Buggy Flats closure is without scientific basis.

The rainfall-triggered camping closure of Dune Buggy Flats lacks sufficient rational to support this major action. This proposal presumes that BLM is incapable of enforcing the PMV CH closures. This proposal ignores historical closure compliance and assumes that BLM cannot provide the required enforcement resources.

4. Microphyll Woodland Closure is without scientific basis.

The proposed camping closure in the eastern part of the dunes is unreasonable. Under Alternative 8, this closure would be implemented to protect microphyll woodland and would extend from Wash 25 to Wash 69. There is no scientific evidence that any of the microphyll woodland in this eastern portion of the ISDRA has been damaged from camping or any other recreational activity. Appendix "O" regarding bird populations provides no conclusive evidence in support of a camping closure. Even if it did, balanced use is not achieved by closing 100% of microphyll woodlands.

The PRBO study quoted in appendix "O" states that best quality woodlands exist in the wilderness area across Hwy 78. The study indicates that increased bird numbers in closed areas may be due to it being the best quality habitat. The study admits its own flaws and recommends further studies and data gathering.

Microphyll woodlands do not compose all of proposed closure. The microphyll woodlands are farther from wash road as the wash numbers increase to the Southeast - thousands of acres of non-microphyll woodlands are able to support camping.

A large area exists between microphyll woodlands and wash road. From Wash 25 to Wash 69, there are approximately 5600 acres that are not microphyll woodlands (using rough tools provided by Google Earth). The proposed closure includes these acres that are previously disturbed.

Comment Form
Bureau of Land Management
El Centro Field Office
California Desert District



RECEIVED
BUREAU OF LAND MANAGEMENT
2010 JUL 26 PM 3:43
EL CENTRO FIELD OFFICE
EL CENTRO, CA.

Draft Imperial Sand Dunes Recreation Area Management Plan

Name: STEVE WARK

Address: 2209 CARDINAL PK
SAN DIEGO, CA. 92123

() I have no comments at this time, however, please add me to the mailing list.

I ATTENDED THE MEETING IN SAN DIEGO, CA
IF I HAVE TO CHOOSE 1 ALT. I WOULD CHOOSE # 8
I WOULD ADD 2 PASS THROUGH'S TO CROSS INTO DUNES
FROM SAND HIGHWAY
I WOULD LIKE TO SEE MORE PAD'S @ GELKOR RD
I WOULD LIKE TO SEE ALL CLOSURES REMOVED.
THERE ARE PLENTY OF PINE PLANTS ON THE
NORTH SIDE OF HIGHWAY 78 TO PRESERVE
ITS EXISTENCE.
I WOULD LIKE THE MICROPHYLL TO REMAIN OPEN
TO CAMPING FROM I78 TO WASH 40

THANK YOU!

Steve Wark
619 250-6570

Comments may be mailed / hand-delivered to: 1661 S 4th Street
El Centro, CA 92243
Attn: ISDRA RAMP COMMENTS

Comments may also be emailed to: caisdrrmp@ca.blm.gov
Comments may also be faxed to: (760) 337-4490, Attention: ISDRA RAMP COMMENTS

7-23-2010

Dear Mr. Dreyfuss

Comments on 2010 DRAMP PLAN

My name is Ray Mitchell. I got to the Imperial sand dunes recreation area, or as most people call it Glamis dunes. The current, and the proposed closures of certain areas of the ISDA are unfounded.

The closures are based on incomplete and incorrect data. BLM has ignored the findings of Dr. Art Phillips, and Dr. Glenn Hass.

In their studies, they have shown that the PMV is not being destroyed by OHV travel. The plant Pierson's milk Vetch, depends more on the amount of rainfall it receives, and quite possibly thrives because of the OHV travel. Please I urge you to reconsider, and give us a fair shake on the Ray's alternative, not only for me, but for my son, and his kids.

Sincerely Ray Mitchell

4286 TRENT WAY
L.A. CA. 90065

ST. CENTRO FIELD OFFICE
EL CENTRO CA

2010 JUL 26 PM 3:41

BUREAU OF LAND MANAGEMENT
RECEIVED

July 17, 2010

To: RAMP Team Lead
ISDRA Bureau of Land Management
1661 South 4th Street
El Centro, CA 92243

From: Dr. Glenn E. Haas
Aukerman, Haas and Associates
3403 Green Wing Court
Fort Collins, CO 80524
970-498-9350
glennehaas@comcast.net



CC: Bob Mason
American Sand Association

RECEIVED
BUREAU OF LAND MANAGEMENT
2010 JUL 22 AM 11:31
EL CENTRO FIELD OFFICE
EL CENTRO, CA.

Subject: Comments on the ISDRA Draft RAMP of March 2010

In response to the American Sand Association, I reviewed the document in question to assess its adequacy in addressing visitor capacity in the Imperial Sand Dunes Recreation Area. My summary conclusion is that the BLM's ISDRA Draft RAMP does not address visitor capacity.

What follows is a list of observations

1. The concern about visitor capacity is alluded to frequently in many statements and sections throughout the RAMP: quality experience, crowding, noise, medicals, fatalities, dust, arrests, citations, and economic impacts. That is, the RAMP does a good job in diagnosing that there is a visitor capacity problem in the ISDRA.
2. The phrase "visitor capacity," or any alternative phrase (e.g., recreation carrying capacity) common in the outdoor recreation planning profession, only appears once in Volume 1 & 2. There is no mention of visitor capacity where one might expect to see it reported and analyzed such as in the description of alternatives, affected environment, environmental consequences, or glossary.

The absence of addressing visitor capacity is contrary to the professional recreation planning principles adopted by the National Association of Recreation Resource Planners.

3. In Volume II, Issue Summary A-3, it lists the issues and concerns that emerged during the public scoping process. It states that these items "will be considered for analysis in the RAMP/EIS." The second to last concern so listed is "The question of visitor capacity." This is the only reference to visitor capacity that I found in Volume 1 & 2.

Curiously, in Volume I, under Planning Issues 1.3.2., the concern of visitor capacity found in Volume II is not listed. That is, visitor capacity is not addressed in the plan or EIS.

This inconsistency between Volume I & II and the lack of attention to visitor capacity, particularly when it surfaced as an issue in the scoping process, leads me to conclude an arbitrary action was taken to avoid a substantive "hard look" at the real ISDRA situation.

4. The visitor capacity is the supply of available opportunities (e.g., campsites, visitors) for a location while current visitation is one measure of the demand. In this effort, there are two different metrics used for demand and supply. Recreation demand is measured by the current number of visitors with no projections based upon socio-economic/demographic trends. Recreation supply (i.e., visitor capacity) is alluded to by the number of acres allocated as open, limited, or closed.

There are two problems here. The measurement of visitor capacity as the "available acres" is not a standard metric within the recreation resource planning profession. Plus, when the measurement of demand (i.e., visitors) is different than the measurement of supply (i.e., acres), it is akin to comparing "apples and oranges" which is ineffective and confuses both the agency and public.

In the previous RAMP/EIS, recreation demand was measured and reported as the number of overnight camping parties; recreation supply (i.e., capacity) was measured as the "number of available campsites." This permitted for a simple understanding of current recreation "demand/supply" in different locales of ISDRA.

5. Visitor capacity is, by default, specified for those areas identified as "closed"; that is, while not so stated, the visitor capacity is zero. The visitor capacity for the "open" or "limited" areas is not specified in any fashion.
6. In the Economic Methodology 4.18.1.2.1., Table 4-10, there is reported that the number of tow vehicles from the current situation presented in alternative 2 (350,000 vehicles) would increase to the number of tow vehicles estimated in the preferred alternative 8 (532,000 vehicles). This 50% increase in recreation demand is not analyzed or discussed in any other section. It defies professional logic to assume that such an increase in visitation will not affect the current crowding, noise, conflicts, resources, medicals, fatalities, visitor satisfaction, quality experience and other issues generally discussed in the document.

Future projected recreation use, and its consequences, is a fundamental consideration to any visitor capacity analysis or in comprehensive public planning process.

7. In the BLM Planning regulations, Section 1610.4-4 Analysis of the Management Situation, it indicates that the analysis (inventory) should include the estimated sustained level of various goods, services, and use that may be attained.

Recreation use is a multiple use recognized by the BLM and is recognized as a significant public service on the ISDRA, yet the RAMP is silent on the estimated sustain level (i.e., capacity) that may be obtained.

8. In the BLM Planning regulations, Section 1610.4.5 Formulation of Alternatives, it indicates that the No Action alternative should be considered---that is, the continuation of the present management prescription set for in the 2003 RAMP.

In the 2003 RAMP, visitor capacity was addressed. Yet, in this draft RAMP none of this information, analysis, and 2003 decisions about visitor capacity is carried forth. That is, the BLM did not duly consider and analyze the No Action alternative when it comes to visitor capacity.

The recreation portion of this plan and EIS is very general and lacks being comprehensive, substantive, or having a systematic and rigorous analysis. The "hard look" at one of the most central issues in recreation management---visitor capacity---was not done. It is not possible for the public, local communities or cooperating agencies to understand what the proposed visitor capacity is across each alternative starting with the No Action, let alone the evaluation of effects from these proposed levels.

I believe this draft RAMP is professionally unacceptable, is in violation of BLM planning regulations, and not legally sufficient in terms of Administrative Procedures Act and the National Environmental Policy Act.

BLM
attention Erin Dreyfuss
1661 S. 4th Street
El Centro, CA 92243

RECEIVED
BUREAU OF LAND MANAGEMENT
JAN 21 AM 11:35
FEDERAL BUREAU OF INVESTIGATION

Dear Ms. Dreyfuss,

My name is Jeff Lievensen. I have lived in Southern California my entire life. My mother was an avid backpacker and camper and took my two younger brothers and myself on countless trips to the deserts and mountains of our beautiful state. As responsible campers we were taught from a very young age to leave our camp site cleaner then we found it. We were also taught that the land we camped on and trails we hiked belonged to us as citizens of this great nation. And as the 'owners' of this land we must care for it. We attended numerous 'trail day' hikes volunteering our time to maintain the land for future generations to enjoy. The lessons I learned from my mother have been passed on to my children.

My first trip to ISDRA was in 1995. I had heard the stories of the large amount of people that used the ISDRA lands but never could have imagined that so many people would spend time in such a place. About 10 years ago the ISDRA was subject to closures covering ~49,000 acres. It was my understanding that these closures were temporary and would someday be reinstated. I have read the RAMP plan and it states that the closed area will now be reduced to ~33,000 acres and limited to 525 vehicles per day, but only after an environmental course has been completed. This does not seem to be a reinstatement of our lands.

I ask that the current RAMP alternative have a minimal impact on the dunes so that I and thousands upon thousands of other responsible people may continue to enjoy our right to camp in the ISDRA.

Thanks you for your consideration on this very important matter.

Sincerely,

Jeff Lievensen



From: Nn7a@aol.com
To: caisdrmp@ca.blm.gov
Subject: comments on Draft ISD RAMP/EIS
Date: 07/28/2010 11:58 AM
Attachments: [APhillipsCommentsFINAL7-29-10ISDDRAMPandEIS.doc](#)

Attached are my comments on the Draft ISD RAMP/EIS.

Arthur M. Phillips, III, Ph.D.
P.O. Box 73
Eckert, CO 81418

email: nn7a@aol.com

Arthur M. Phillips, III, Ph.D.
Botanical and Environmental Consulting
P.O. Box 73
Eckert, Colorado 81418

email: nn7a@aol.com

July 28, 2010

Bureau of Land Management
RAMP Team Lead
1661 South 4th Street
El Centro, CA 92243

Subject: Comments on March 2010 Draft RAMP/EIS

Thank you for the opportunity to review and comment on the Draft RAMP/EIS issued in March 2010 by BLM. I have reviewed the documents, and offer the following comments and suggestions. By way of full disclosure, I was compensated by the American Sand Association (ASA) as a consultant in preparing my review; however, the comments contained herein are my own and do not necessarily reflect an official or approved position by ASA.

Peirson's Milkvetch ("PMV")

My main concern with the Draft RAMP is the superficial and incomplete coverage of the biology and ecology of Peirson's milkvetch (PMV). Since this is the only FWS listed species known to occur within the Planning Area, it requires a thorough discussion of its biology, ecology, and distribution within the PA, and justification for the proposed actions included in each alternative.

The actions proposed for each alternative seem inconsistent, with no explanation as to why *X* acres of designated Critical Habitat (CH) plus area in excess of CH are closed in one alternative, while *Y* acres are proposed in another. In Alternatives 2-7 closures exceed CH in one direction or another, while some CH is left open; what is the justification for closing areas where PMV does not occur or rarely occurs, while opening up some places that are within designated CH? Since no Recovery Plan has been issued by FWS for the species, it is impossible to know what the criteria for "recovery" might be, and closing areas outside the designated CH is both speculative and unjustified.

The species information section for PMV should be expanded to show that the following elements of its life history have been taken into due consideration by the BLM in developing Alternatives and discussion in the DRAMP:

1. the effects and importance of rainfall in both seasonality and amount in causing germination, growth, successful reproduction, and summer survival of PMV. “Average” rainfall does not mean much in an area with 2-3 inches per year.
2. life history of PMV; conditions necessary for first-year flowering, first-year reproduction vs. perennial reproduction; longevity of plants; survival through summer season.
3. ecology of the PMV seed bank and its importance to survival of the species
4. clustered distribution of PMV within the dunes; types of habitats where it is found and not found (you can’t estimate density by dividing number of plants by ha. in dunes [App. H, A.1 p. H-4] because they are NOT evenly distributed).
5. effects of OHVs on PMV and vehicle use patterns in the dunes with respect to PMV distribution is important in determining CH closure design and possible establishment of “pass-through” routes (see below).

In preparing the DRAMP, BLM has apparently made a decision to ignore, been requested to ignore at higher levels within BLM or by another agency, or simply overlooked a large body of information and data on the distribution, ecology, and biology of PMV. ASA-sponsored research was detailed in reports issued annually from 2001-2007. Only the first of these reports, called “TOA 2001,” is acknowledged (p. H-6). I strongly recommended that the other six reports be read by appropriate BLM personnel and the information therein be incorporated in the DRAMP. Information on most of the questions posed above may be found in these reports, including detailed information on the relationship between rainfall, seasonality, and PMV germination and reproduction; the distribution and demography of the plant; and studies of the seed bank.

Following are the references to the seven reports. These were sent annually to BLM in El Centro and FWS in Carlsbad, as well as other agencies. It is my understanding that ASA has recently sent electronic copies to BLM in case hard copies are missing from files.

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Rainfall-triggered closure of Dunebuggy Flats (DBF)

This proposal is mentioned several times in vol. I, and described in Appendix E in vol. II. The one-page discussion is insufficient to justify such a major action, and there is no explanation of how the rationale for closure was developed. The entire proposal is based upon the premise that OHVs are bound to illegally enter closed areas and that BLM has insufficient resources to enforce the closures. No justification is provided for this assumption; in fact, illegal OHV entry into administrative closures has been only a minor problem since they were decreed in 2001.

The nearest PMV populations of any consequence are more than a mile from DBF and are rarely disturbed. Sandy ridges are used as pass-through areas by drivers wishing to access higher dunes from the Sand Highway. Whoever conceived of the closure was apparently not familiar with PMV distribution and OHV use patterns in the dunes east of DBF. Without further explanation and justification, the proposed rainfall-induced closure of DBF is without any merit.

OHV Closures and PMV CH

While the available scientific studies prepared by BLM and Phillips and Kennedy do not support closures, it is recognized that PMV remains a listed Threatened species with

designated CH, possibly necessitating some sort of closure in order to obtain FWS Section 7 endorsement of the DRAMP management provisions for the species.

The preferred alternative, Alt. 8, calls for closure of all areas designated as Critical Habitat (CH) for PMV by FWS. This includes an area of the north dunes north of the wilderness area, the wilderness area, an area from the central dunes southward nearly to I-8, and a small area near the border south of I-8. The large proposed central dunes closure is irregular in shape, and includes several narrow “peninsulas” extending eastward from the main body of the closure. There is a break at the southern end with a disconnected area to the south.

Marking such an area on the ground would be a difficult task, and the narrow peninsulas would be extremely confusing. The lack of pass-throughs for miles and miles would make entry into the open area to the east difficult. This would be confusing to both recreationist and law enforcement.

As an alternative to the CH closures proposed in Alt. 8, I propose a smoothed boundary around the main body of the CH, eliminating the peninsulas from closures. Unlike the temporary closures, the boundaries should follow the morphology of the dunes, in the interest of safety and clarity. This would not need to be as wide as the closures in Alt. 5 and 7, because the eastern third to half of those areas is beyond the CH boundary and without significant PMV populations.

Clearly marked pass-through routes should be established every half-mile to mile along the central closure to allow OHVs to access open areas to the east from the Sand Highway and remove the temptation to cross the closed area. It will not be difficult to locate areas that can be safely traversed without PMV; lateral sand ridges are frequent in the area and are currently used without affecting any PMV plants. This will also eliminate the necessity of rainfall-induced closure of DBF, as the temptation to closed CH area will be reduced by having regularly distributed designated crossings. The boundaries of the closure and the pass-throughs should be clearly marked and maintained.

Insect studies

The large number of unprocessed insect specimens makes this study incomplete. Since none of the species are listed by FWS or considered as Sensitive, it is difficult to evaluate its significance. Apparently, most of the collecting occurred in areas accessible by road, with little attention paid to the central dunes, where vegetation is better developed and disturbance due to human activity is less, so coverage of the dunes is incomplete.

The report states (sec.3.6.4, p. 3-28 through 3-32) that less than 2% of insect specimens collected have been identified and processed, and that collection localities were not comprehensive in their coverage of the dunes. Since no Special Status insects are apparently known from the PA, it is questionable why the lengthy insect report is included as Appendix G of vol. II. While the information is interesting and not available elsewhere, the DRAMP does not seem to be a relevant place to present it. Perhaps one of the several available PMV reports could be inserted in its place?

On p. 3-30, sec. 3.6.4.6, Human Impacts on insects, *Tiquilia plicata*, listed as a plant associated with various insects, is much more widespread than indicated. It is in fact one of the most common associates of PMV and associated shrubs in the central dunes. The report also states that it is “endemic;” to where is not specified. In fact, its distribution includes the head of the Gulf of California in Sonora and Baja California, Mexico; southern California; western Arizona; and southern Nevada. It is in fact widespread in many desert areas of the Greater Southwest and northern Mexico.

Microphyll woodland

This is an environmentally sensitive area the importance of which extends well beyond the list of birds recorded there. It is home to many other desert animals, as well as a specialized suite of plant species. Unlike the dunes, damage in the woodland is not repaired with the next windstorm. I have not personally seen the microphyll woodland areas south of Wash 25 or in the north dunes area, so I cannot evaluate or compare the two areas. However, I am very familiar with comparable microphyll woodland areas in the Sonoran Desert in southwestern Arizona and have come to appreciate their importance in the overall landscape.

BLM has apparently not conducted vegetation and habitat analysis studies within the microphyll woodland (Appendix O, p. 19). Since vegetation is the underlying component not only for the avifauna component reported, but also for all other elements of the microphyll woodland community, a comprehensive baseline analysis of the plant community would seem to be an imperative component of any decision-making process that involves Alternatives affecting management of the microphyll woodland. The report included as Appendix O cites deficiencies in the avifauna analysis including sampling shortcomings and errors that should be resolved before an informed management decision is possible. The decision to implement camping restrictions in Alternative 8 (but not in other Alternatives) appears to have been arbitrary and premature, and should be further justified. Decisions involving management alternatives for the microphyll woodland would appear to require additional, more comprehensive scientific study and analysis.

Other concerns

P. 3-123 sec. 3.16.4 – the last sentence states “the 1994 CDPA designated the North Algodones Dunes Wilderness within the Planning Area, **withdrawing it from all forms of land entry**. This is inconsistent with sec. 3.12.11, p. 3-95, which states that [the] **wilderness area is closed permanently to OHVs and other mechanized use, with hiking and horseback access permitted**.

Pages 4-32 and 4.33, and Table 4-6, and Appendix F, page F-4, do not appear to agree on the number of acres open and closed to OHVs under the various alternatives.

Arthur M. Phillips, III, Ph.D.
Botanical and Environmental Consulting
P.O. Box 73
Eckert, CO 81418

nn7a@aol.com

From: [India Sepulveda](#)
To: caisdrmp@ca.blm.gov
Subject: Glamis Recreation Area
Date: 07/26/2010 01:45 PM

I am writing to plead with you to keep Glamis open. We have been going to Glamis with our family for years and the closures and restrictions are making this way of life vanish. Our children were brought up riding in the dunes and now our Grandson rides in the dunes. We camp with other families and enjoy this activity with them. We realize that a few can ruin this experience for many, so please do not punish those of us who cherish this great family activity by closing the dunes or restricting them any further.

Keep Glamis open and keep our family tradition alive!!

India Sepulveda
Sepulveda Companies
2048 2nd Street, Norco, CA 92860
951 279-9000 Fax 951 848-9631

From: ddanno2000@aol.com
To: caisdrmp@ca.blm.gov
Subject: Comments regarding 2010 DRAMP for the ISDRA
Date: 07/24/2010 09:11 AM

Dear Erin Dreyfuss,

As an avid ISDRA visitor, I would appreciate that you include the comments of Dr. Glenn Haas and Dr. Art Phillip, as well as the studies sponsored by the ASA in regards to the PMV plant in the ISDRA when deciding which alternative to select. The BLM has implemented temporary closures which quite frankly are anything but temporary, in order to further study the PMV. However it is quite clear that the studies are often biased, and lacking greatly a complete and clear picture of the PMV life cycle in the ISDRA. The BLM has decided to ignore 6 out of 7 reports sent by the ASA in it's 2010 DRAMP which only further proves the unbalanced approach the BLM has when collecting and presenting data on the PMV.

I would prefer to see all temporary closures removed, although I also support the hybrid of alternatives 7 and 8 as presented by the ASA as a next best option.

Sincerely,

Daniel B. Wyrick
12353 E. Camino Loma Vista
Yuma, AZ 85367

From: [W H Wolverton](#)
Reply To: canyonratbw@scinternet.net
To: caisdrmp@ca.blm.gov
Subject: Protect the Algodones Dunes
Date: 07/24/2010 04:44 PM

I'll be brief and to the point: just say NO!!! to any expansion of off road vehicle abuse of the Algodones Dunes

W H Wolverton
Box 393
Escalante, UT 84726
US

From: [JMC](#)
To: caisdrmp@ca.blm.gov
Subject: Attention: Erin Dreyfuss, Please read.
Date: 07/21/2010 09:58 PM
Attachments: [BLM.docx](#)

BLM
attention Erin Dreyfuss
1661 S. 4th Street
El Centro, CA 92243

Dear Ms. Dreyfuss,

I am writing this letter to let you know as a tax paying, active voting citizen, and avid ISDRA recreational user, that I am watching the 2010 DRAMP issue very closely. My voting record and charitable donations reflect a sound ORV atmosphere in California, especially the ISDRA.

My entire family depends on the outdoors and off-roading and frankly, without it, as much as it would hurt, I would consider moving to a friendlier Off-road State.

I can appreciate the biology and habitat of our beautiful state and as a family, strive to make a difference through educating, appreciating, and donating.

Please know that anything that greatly impacts our ability to use the ISDRA is a blow to families, culture, tradition, and most importantly, our freedoms.

As a third generation Californian, I urge you to give us a "fair" shake on the ramp alternative, for my children, and their children.

Sincerely,

Jason M. Courtois and Family

8310 Sunview Dr.
El Cajon Ca. 92021
619-249-1675

[avast! Antivirus](#): Outbound message clean.

Virus Database (VPS): 7/21/2010
Tested on: 7/21/2010 9:57:54 PM
avast! - copyright (c) 1988-2010 AVAST Software.

From: [jonjackie](#)
To: caisdrmp@ca.blm.gov
Subject: 2010 DRAMP of the ISDRA
Date: 07/21/2010 02:50 PM

21 July, 2010

Dear Mr. Dreyfus,

I personally attended the San Diego meeting of the presentation of the latest BLM DRAMP for the ISDRA. After listening to BLM's proposal of using Alternative 8 as their "best choice" I will have to wholeheartedly disagree to this choice. Without getting into a lengthy dissertation as others who are "more educated" on this subject have, I will just list some "points".

1. **The Imperial Sand Dune Recreation Area (ISDRA) is a recreation area and should remain as such.** As much as I am in favor of "alternate energy" sources such as solar, wind and geothermal I don't believe that any land within the designated recreation area should be allowed to become "commercial" except in the direct support of the ISDRA itself, and that on a very limited basis. The BLM has plenty of land not designated as within the ISDRA but within this arid region that can be utilized for the commercial development of wind, solar and geothermal, if so needed.

2. For the past 9 years that I have been duning in the ISDRA I have respected the environment of the dunes and campsites and have honored the areas which were mandated closed. These closed areas have sometimes been very hard to define and occasionally I believe it is possible I might have unintentionally violated those areas. Having previously been a military low-level helicopter pilot and having had the training to navigate while flying the "nap-of-the-earth" through the use of sectional maps, I have personally found that there is a great degree of difficulty to identify boundaries unless they are clearly marked. That is to say, it is much easier to have a "natural" feature to navigate around then just placing vertical markers in the sand which can get covered up or blown away. The boundaries of the ISDRA which are very easy to identify are: North: Highway 78; East: the railroad tracks and railroad access road; West: the canal; South: Interstate 8. Now, I obviously have not included the "Buttercup Area" but it also has "natural" boundaries which can be easily identified.

3. As for the environmental impact on the PMV plants, I personally feel that this whole issue went to court as a "guise" to start the closing of the dunes to off-road vehicle use for the benefit of other groups. From the information I've seen, subsequent to the initial "diversity" report and lawsuit promulgating the temporary closures, the scientific studies on the PMV is not conclusive as to any negative impact on this plant by OHV activity. The amount of rainfall seems to be the most important factor, and even that is not conclusive as to where the rainfall must be within the region, except in the vicinity of the plants themselves.

4. During the San Diego meeting a guest speaker brought up the subject that hiking should be allowed within the ISDRA. It is my understanding that hiking and camping is allowed within all of the ISDRA at this time, and that the hikers also can utilize the area north of Highway 78 and any other temporary closed areas, which OHV's cannot. I have never personally seen any hikers within the ISDRA except for those who have broken down and are going for help.

5. One more issue which was presented at the San Diego meeting was that of Imperial County's "failing" EPA's air quality standards. I am not familiar with this subject except that most of the low elevations of Imperial County is subject to a weather pattern which is arid and windy which makes it very conducive to frequent dust and sand storms. As to how much pollution is actually generated by the driving of OHV's in the ISDRA and other surrounding areas is most likely an "unknown quantity" at this time. I would venture to say that the majority of any pollution is probably generated by RV's, trucks and cars which should all be complying with EPA standards at minimum. As for pollution standards set for OHV's, I believe that all sandrails manufactured after a certain date are to comply with a new set of pollution standards. This paragraph is most likely out of the jurisdiction of the current BLM DRAMP, except I would guess that it is an issue in other meetings between the BLM and State/County governments.

In conclusion, I feel the best answer to the new BLM DRAMP is to use Alternative 1. It automatically gives clearly defined borders; it eliminates commercial wind, solar, and geothermal production within the ISDRA boundaries; it keeps all current camping areas open. The Park Rangers and Imperial County Sheriff's may now concentrate on more important issues within the ISDRA than trying to enforce "artificial" boundaries and "closed" camping areas, plus eliminating the expense of adequately posting these areas.

Sincerely,

Captain Jon S. Gregory
USNR Retired
United Air Lines Retired

2418 Amity Street
San Diego, California 92109
858-274-8418 (Home)

From: [Brennand Schoeffel - RBV Real Estate](#)
To: caisdrmp@ca.blm.gov
Subject: Comments on the 2010 ISDRA DRAMP
Date: 07/19/2010 12:06 PM

<http://files.americansandassociation.org/files/2010%20RAMP/APhillipsCommentsRev6-10-ISDDRAMPandEIS.pdf>

http://files.americansandassociation.org/files/2010%20RAMP/July_16_2010_Haas_Final_ISDRA_RAMP_Comments.pdf

Hi Erin, above are the links to Dr. Art Phillip's and Dr. Glenn Haas's comments regarding the 2010 ISDRA DRAMP.

I just want to add I love going out to the BLM parks with my family and exploring, camping and riding. We take great care to be careful of local habitats and go by the saying "Pack it in – Pack it out."

One thing I would like to add though – over the years we have seen the popularity of duning/camping in the BLM areas and on the larger weekends it gets really busy out there so we avoid those weekends these days. If we are to lose more rideable space it will only concentrate the people that are going to be out riding and make it more unsafe even on the off weekends. Please help keep it safe out there for everyone. Thank you



Brennand Schoeffel

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From: [Dan Thomas](#)
To: 'caisdrmp@ca.blm.gov'
Subject: 2010 ISDRA DRAMP
Date: 07/19/2010 12:40 PM

Dear Planning Team,

I am requesting that you implement alternative 1 to provide reasonable motorized access to the Imperial Sand Dunes. I live in Utah and have been going to this area for 15 years, the current closures are unnecessary and should be removed. Studies have shown that there is no danger to the PMV from OHV use, therefore the historical uses that preceded the closures should be reinstated

Thank you for considering my comments,

Sincerely,

Dan Thomas
794 E 400 S
Payson, UT, 84651

From: [Philip M. Piel](#)
To: caisdrmp@ca.blm.gov
Subject: Dramp for Glamis Sand Dunes
Date: 07/19/2010 01:58 PM

Hello Erin,

I have started this e mail numerous times only to erase it and move on to other day to day matters. I have been an avid off road enthusiast for over thirty years. During this time I have frequented the high desert, low desert as well as Glamis & Dumont Dunes. I have seen environmental laws and regulations used as a weapon by those wishing to have public land cordoned off keeping people such as myself from enjoying the sport I hold so dear.

In attempting to work within the system I helped fund environmental studies through membership fees and donations to associations who represent responsible off road enthusiasts. These studies clearly show the success of the Pierson's Milk Vetch is tied to rainfall with little to no effect from off road vehicles. Based on these studies I thought we'd be able to go back to the old agreement keeping everything North of Highway 78 except Mammoth Wash off limits while abolishing the central closures. This apparently is not to be. I have come to realize the goal of the Center for Biological Diversity is not the wellbeing of the indigenous plants and animals, the goal is ending the sport of off road riding. So be it. I now find myself writing this e mail to you and quite frankly don't know where to go with it. On one hand I want to convey my disgust with the whole system with a tantrum regarding how I now intend to be one of the 3% of riders with zero regard for rules who are used as poster children for why Glamis should be closed. The other side of me wants to beg you to stand up to environmental extortion. Erin, I honestly don't know which statement to make.

I guess this is the best I can do as I'm just tired of fighting for access to PUBLIC land. However this thing works out I'll be riding in the dunes, either I'll be a responsible family man who leaves his campsite better than he found it or as an outlaw chased down because he violated some ridiculous central closure that was put in place for exactly that purpose so I can be held up as an example of not following the rules. I don't envy your assigned task and I understand the power of the people on the opposite side of the issue, all that can be expected from you is impartiality, unfortunately money funding lawsuit after lawsuit makes expedience a lot more attractive. Good luck to you in finding some sort of compromise, however this pans out I'll behave accordingly.

Best regards,
Philip

Philip M. Piel
Vice President
West Coast Group Benefits
10809 Thornmint Road, Suite 100
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From: [Lena Fawson](#)
To: caisdrmp@ca.blm.gov
Subject: Comments Re: DRAMP & DEIS for the Imperial Sand Dunes Recreational Area 2010
Date: 07/19/2010 04:28 PM

Erin,

I only recently began visiting the Imperial Sand Dunes Recreational Area (ISDRA). I must admit, since I began using the land and becoming more aware of the techniques used to manage the ISDRA, I have been sorely disappointed. I am quite aware of the need to protect particular plants, and or wildlife. As an avid backpacker, and National Park visitor I've had opportunities to see wild wolves, bears, mountain goats, and even some plants such as the beautiful Sego Lilly of Utah. However, I would never have had this opportunity without the ability to recreate in those lands. I would even say, that it was my ability to experience first hand all those sightings that instilled a personal passion about also preserving for future generations their ability to recreate and enjoy sightings of their own. A careful balance must be struck between preserving the land and wildlife with a management plan that allows visitors to recreate in, experience and enjoy the land.

And this is where my personal disappointment begins. I would fully support a management plan that used sound science to base decisions upon. It has become quite clear to me, the Bureau of Land management (BLM) has consistently chosen biased and often incomplete studies to back closures in the ISDRA. They have reached 'conclusions' from these studies for such things as recovery of the Pierson's Milk Vetch (PMV) without having enough information to even begin outlining what would determine the recovery as an actual success. They have also ignored numerous studies sponsored by and sent by the American Sand Association (ASA) regarding PMV. I won't waste time copying and pasting what's already been said. I fully support the comments already submitted by the ASA including Dr. Art Phillip and Dr. Glenn Haas.

With everything I have stated in mind, I would prefer a hybrid of alternatives 7 & 8. The idea closing of Dune Buggy Flats based on rainfall is unsubstantiated period. Closures need to have distinct boundaries that are easy to follow, and preferably take into account the natural flow of the terrain. It would seem wasteful at best to me to mark and enforce a closure area with so many peninsulas and long skinny fingers reaching away from the main body as in Alternative 8.

Regards,

Lena Fawson
11422 E 24th Pl
Yuma, AZ 85367
yena_fa@hotmail.com
602-400-5282

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From: [Kirk Lamb](#)
To: caisdrmp@ca.blm.gov
Cc: MommySheep1@aol.com
Subject: Support position of the ASA Dramp recommendation.
Date: 07/19/2010 10:38 AM

Erin,

I have been a regular visitor th the Dune area under review since 1980. I and my family enjoy visiting this unique area. The dunes have in no way been affected negatively by recreation use, even with a dramatic increase in public use. Anyone who visited the dunes 30 years ago and again today would see no visible signs of deteriotion, even when done by scientific study as the studies clearly support this claim.. The species chosen to be protected have enormous areas already set aside for their protection.

The only physical sign of abuse in the Dunes has been caused by illegal immigrants crossing the area to enter the U.S. and this is due to the trash and personal belongings discarded as they cross the area.

I agree with the finding and conclusions of the ASA. I see this entire effort of the BLM to force UNWARANTED Closures upon the public as flawed and an aggressive effort of some misguided group or agency to close a recreation area for no probable cause. While the initial effort was to protect a WEED that grows in this area, it CLEARLY is not threatened to become extinct and all scientific reviews have proven the WEED is not impacted negatively by recreational use in the area. The BLM has blatantly chosen to ignore studies that clearly show the WEED is not negatively impacted in any way. In fact evidence shows the opposite that the WEED is more likely to germinate and prosper in the use area. I ask that the BLM show some common sense and realize that your governance is to allow the proper use and managements of public land. Denying the public to use this land without taking into account ALL the scientific studies that clearly show that no harm exists to the species chosen to protect is an outrage and another example of government gone awry. It is obvious to the thousands of recreation users of the dunes that this is a LAZY review of all the evidence and nothing short of criminal in ignoring all the evidence while plowing ahead with a reckless land closure.

Kirk Lamb
President

Direct Access Legal Services, Inc.
550 W. Baseline Rd., Suite 102, # 200
Mesa, AZ 85210

480-464-8484 Office
480-464-8383 Fax



From: [Glen W. Ortel](#)
To: caisdrmp@ca.blm.gov
Subject: Purposed New BLM plan
Date: 07/19/2010 10:38 AM

Erin Dreyfuss:

I have been going to the Gordon Wells Dune area for 20 years and I can say if you close more area off the chance of injury increases dramatically. Put more people going fast in a smaller area is just plain stupid.

I have a Geological degree and if you study the earth over time what damage we can do to the dunes is insignificant. One good wind storm and more damage is caused than we could ever cause.

I am very Disappointed in the BLM's management plan. I think you are giving in to the opposition because let face it they have more money than the actual people who use the dunes.

The only one that keeps winning is the attorneys.

Thanks for your considerations to open more space for ridding. The Federal parks are for peoples to enjoy and use!! Not just to look at. That is why kids today are getting fat they don't get out and do anything.

Glen W. Ortel
ACE Hardware
2185 E Irvington Rd
Tucson, AZ 85714
glenortel@cox.net email
520-404-6768 cell
520-434-9000 store
520-844-1310 fax

From: [Charlie Kahle](#)
To: caisdrmp@ca.blm.gov
Subject: Comments on the 2010 ISDRA DRAMP
Date: 07/19/2010 10:10 AM

Dear RAMP Team Leader,

Of the alternatives discussed in the DEIS, the American Sand Association (ASA), of which I have been a member for several years, prefers Alternative 1. However, the ASA believes that some of the other alternatives, notably Alternatives 7 and 8 each have attractive features which could be combined into a potentially effective hybrid. Realigning the irregular boundaries of the Alternative 8 proposed *Astragalus magdalenae* var. *peirsonii* (PMV) critical habitat (CH) closures, increased signage and law enforcement during exceptional rainfall years along with clearly marked pass-through routes would provide a more manageable alternative.

I respectfully request that Bureau of Land Management (BLM) either adopt Alternative 1 in the Final EIS, or consider and assess a hybrid alternative by taking parts of Alternatives 7 and 8.

Yours Truly,

Charlie Kahle

From: [Todd Cochran](#)
To: caisdrmp@ca.blm.gov
Subject: Changes at Glamis
Date: 07/19/2010 09:34 AM

Ms. Dreyfuss,

I am writing to you to voice my hope for improved conditions for off-roaders at the Imperial Sand Dunes.

Please put me on the side of NO MORE CLOSURES. I am a very responsible off-roader and always try to leave the dunes better than when I got there. I haul away my own trash and some left there by others. I don't drink alcohol and make every effort to be safe.

I know that with budgets the way they are, people in government are looking for ways to reduce expenditures and services. However, I just don't think cutting back on recreation opportunities at Glamis is the way. Off-roaders pay fees in the form of gasoline taxes and registration fees that support our right to have off-road recreation areas in California. Glamis has a long history of off-roading and I want to see that continue for generations.

Please don't further restrict our opportunities at the Imperial Sand Dunes.

Respectfully,

L. Todd Cochran, DDS
25534 Mandarin Court
Loma Linda, CA 92354

Home Phone: 909-796-5806
Cell Phone: 909-965-2193

From: SeaDuner@aol.com
To: caisdrmp@ca.blm.gov
Subject: 2010 ISDRA DRAMP comments
Date: 07/18/2010 06:27 PM

The more you close recreational dune use land the more you ruin family life for millions. I can't believe sane minds don't see the value of families recreating together as a family unit, creating memories and fun for all classes of people. The beauty of the dunes it offers low cost recreation, providing great value to people in all walks of life. What better way to get all classes of society together with a common interest, sand. I see lawyers, plumbers, mechanics, accountants, dentists, baseball players, you name.... they all enjoy the sand, yet for some reason the "power to be" keep closing land for no reason. Even after the milk vetch was proven not in danger, the authorities would admit they made and mistake and open up the closed land. Where's the justice in proving something if the courts don't admit wrong doing and use evidence to right a wrong? What's wrong with our justice system today?

The pursuit of happiness is important, and what the dunes offers the local economies is just as important, not to mention the millions spend on RVs, trailers, campers, tents and other equipment bought around the country. Closing land benefits no human beings with tangible value. There has never been any proven problem with nature by letting the public use their land. 30yrs ago authorities close the land north of HWY 78, saying that's all you'll ever close, so you could compare the north to the south. Now, with trumped up reason you threaten to close more land. You must consider the needs of the many, and discount the needs of the few, if you call them needs. Please consider steps to maximize the use of the dune land by keeping it open. If you really cared about our society you would embrace the ideal of recreation in the dunes allow further development. You would run electrical power to the area and let private enterprise build campground with hookups, pools, waterparks, etc. This could be a fantastic weekend getaway for millions if you would only open up your minds to the possibilities, and stop focusing on seeds and varments. What is this world becoming? I just can't believe rational minds don't prevail. The millions that enjoy the dunes aren't hurting anything. Duning has been going on for 50yrs and the dunes are still a great destination. Please don't close them, open them up more. Do it for the kids, and the kid in all of us. Duning keeps people young.

Regards,

Tom Spurlock
Yorba Linda, CA
92887
714-803-4598

From: [Steve Chader](#)
To: caisdrmp@ca.blm.gov
Cc: [Robert Mason](#)
Subject: DRAMP attention Erin Dreyfuss
Date: 07/18/2010 06:10 PM

Dear Mr. Dreyfuss,

Thank you for your work and your interest in protecting public lands. I have read the responses by the ASA and scientists who have studied the area and I will not repeat their comments. I do however support their concerns that the proposed alternatives are poorly conceived and in some cases without merit based on faulty assumptions.

I do want to be on record as opposing the apparent overreaching to solve a problem that likely does not exist. Over the past years the closed areas have not demonstrated that they provided any significant protection of the PMV weed. It seems apparent that when the right rainfall amount happens the dormant weeds returned to both the open and closed areas.

Based on the incomplete analysis as presented by others and the clearly demonstrated lack of compelling need I would respectfully request that no further closure or restriction of the Dunes public lands be imposed.

Steve Chader
9446 E Hobart Circle
Mesa, AZ 85207
480-632-4208

From: [Jan Lavery](#)
To: caisdrmp@ca.blm.gov
Subject: sand dune closure
Date: 07/18/2010 05:06 PM

Dear Ms. Erin Dreyfuss:

I just don't really know what to say to get you to make a fair decision concerning closures of any part of the Imperial Sand Dunes. I can only explain my own situation to see if you will get it.

I am 67 years old and my wife older. We just got a sand rail about 7 years ago. It is one of the most fun sports I have ever been involved in and wish I had found the sport sooner. We don't get to do it very much, but I can see how people could spend their entire life involved in it. What a fantastic FAMILY sport. How could you consider stopping people from enjoying it. You shouldn't be closing any of it, let alone closing more than you already have closed or restricted.

It is my understanding you and the BLM have not considered all the information that is available to you and especially that from the ASA. For me to argue points of it to you wouldn't make a lot of sense when you and specialists in the field have a much better understanding of it. One thing I do know, is that if you decided the Peirson's milkvetch was lethal to all other life on the planet, you could not eradicate it. You couldn't take every off road vehicle in the United States and run them day and night on the Imperial Sand Dunes for the next 100 years and kill the plant off. You couldn't do it.

Therefore I am pretty sure the people that advocate for closures, are just unhappy people who don't want to find things that please them, but just want to hurt others by ending what others find good to do. Please don't fall under their spell. This is a harmless family sport.

Jan Lavery

2355 Mandalay Drive

Lake Havasu City, AZ 86404

916-847-8036 cellular

From: [Gary & Sharon Kepple](#)
To: caisdrmp@ca.blm.gov
Subject: The RAMP
Date: 07/18/2010 12:27 PM

Dear Ms Dreyfuss,

The proposed BLM Imperial Sand Dunes Recreational Management Plan is wrought with many faults that are well pointed out here by Dr Art Phelps.

<http://files.americansandassociation.org/files/2010%20RAMP/APhillipsCommentsRev6-10-ISDDRAMPandEIS.pdf>

He correctly points out that there are many proposed actions in The Plan that have no basis in science or common sense.

I stand with the American Sand Association in favoring Alternative 1. As other alternatives...Alternatives 7 or 8 with adjustments to allow corridors through closed areas makes good sense and would keep confusion for users and law enforcement to a minimum.

I won't "cut and paste" and take up a bunch of space here, but please give the comments in this document the weight it deserves...

[http://files.americansandassociation.org/files/2010%20RAMP/Final_ASA_DRAMP_Comments_\(7-17-2010\).pdf](http://files.americansandassociation.org/files/2010%20RAMP/Final_ASA_DRAMP_Comments_(7-17-2010).pdf)

Thank you for your consideration,

Gary Kepple
1540 Suncrest Vista Lane
Alpine, Ca 91901
619-987-6704
cplkpls@cox.net

From: [Tom Hedrick](#)
To: caisdrmp@ca.blm.gov
Subject: Glamis
Date: 07/18/2010 07:03 AM

We have been going and enjoying Glamis for years and are raising law-abiding children to respect our lands. Below is an example of one of the games our family has pasted on to each generation and recently had the game posted in the ASA newsletter.

Our children drag a magnet with a three foot handle on it through the sand searching for any nails or trash. The game goes as follows: Once they fill up their sand bucket with nails and glass they each get an ice cream from the Ice Cream Truck. The girls spend hours dragging the magnet through the sand in our camp.

From: [Troy Weiland](#)
To: caisdrmp@ca.blm.gov
Subject: DRAMP COMMENTS
Date: 07/17/2010 03:09 PM

Before implementing closures in the ISDRA, the draft documents need to include actual scientific data that discusses the PMV and why a certain rainfall threshold has a bearing on this species. If the whole discussion and motivation behind closing some areas is to protect individual plant species and/or habitats, there needs to be scientific data, studies, etc. that support the motivation included in the draft document.

It also needs to be noted that there have been studies in the past that concluded that the PMV actually was more abundant in OHV areas.

If you close an existing area to camping such as Dune Buggy Flats, do you think these people are just going to stay at home and not visit the ISDRA? No, they will be displaced to other areas that are not capable of accommodating this many people. Now you will have new, unforeseen problems of overcrowding, trash, law enforcement, vendors and new damage to lands that were previously not used by campers in these kinds of volumes.

We camp off Ogilby Road, near Interstate 8. Unlike the Gordon's Well area, you will rarely see a piece of trash after a weekend. Have you considered the additional amounts of resources that are going to have to be supplied at areas that will have to handle all of the displaced campers?

Please think a few years ahead and include the proper scientific data in the draft to explain why these decisions are being made.

Troy Weiland

T R W d e s i g n s

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san diego, ca
92116
t. 619-574-1615
f. 619-255-3900
e. trwdesigns@mindspring.com

From: [Laurence Chapman](#)
To: caisdrmp@ca.blm.gov
Subject: ISDRA Ramp
Date: 07/17/2010 02:58 PM

Mr. Dreyfuss;

I am hopeful that some public input might hold sway as you consider the future of the ISDRA riding area.

With the scientific evidence suggesting that OHV activity actually seems to stimulate growth of the Milk Vetch, and evidence that OHV damage affects no more than 1% of plants it seems absurd that you would consider closure of Dunebuggy Flats.

I see no scientific evidence in your report that suggests closure of the Flats will increase germination of the Milk Vetch, nor any criteria for "recovery", so that the impact of this aspect of the Ramp is more public closure of the ISDRA riding area. It was claimed by BLM that the closures several years ago was all that was needed. I see no scientific evidence of PMV deterioration since that time in this report.

Frankly I am very upset with BLM's failure to consider the proper use of PUBLIC lands and its apparent bias to equate Management with Closure.

Hoping for a change of attitude,

Laurence Chapman

From: [Daniel Hurn](#)
To: caisdrmp@ca.blm.gov
Subject: Comments on Dramp Closures
Date: 07/17/2010 01:56 PM

- 1) I feel that by reducing the amount of camping areas we have available it will greatly increase the amount of accidents since the amount of people will remain about the same. Taking the alcoholic accidents into account it still will be a problem. Cramming more people into a smaller area will be a hazard for family outings.
- 2) By closing down or reducing the areas for alternative energy is somewhat ok with me, I agree to the change of adding alternative energy but it can be done in such a way that the amount of area that would need to be closed can still allow campers and duners to have access to areas that they love. Since we are a family and enjoy going to gordons well closing it will make us move to areas that would be considered to us to be too busy to bring the kids which love the dunes.

Thanks,
Daniel Hurn

From: poledanzer@hotmail.com
To: [BLM](#)
Subject: Fw: DELIVERY FAILURE: User caisdrpm (caisdrpm@ca.blm.gov) not listed in Domino Directory
Date: 07/23/2010 11:06 AM
Attachments: [ATT00364.dat](#)

General Comments

This draft document does not include all the available documentation on the status of the *Astragalus magdalenae* var. *peirsonii* (PMV). All the available scientific documents about the PMV should be included in this Draft Recreation Management Plan (DRAMP), as the primary restrictions on recreation proposed in this document is based on the presence of the PMV in the recreation area. Therefore ALL pertinent information that has been published on the PMV must be included to allow the public to make an informed decision on the validity of the claims and on Bureau of Land Management's (BLM) proposed restrictions on recreation.

The DRAMP proposes to restrict camping in Dunebuggy Flats (DBF) when a certain rainfall threshold is met, presumably to provide additional protection for the PMV. However, neither the camping closure nor the rain threshold which would trigger it are supported by technical studies or related data. A proposed camping restriction of this magnitude must have some scientific basis before it can be considered for adoption and implementation. For example, BLM must demonstrate why it believes the proposed rainfall threshold is correlated to increased PMV production. Likewise, BLM must demonstrate why it believes the proposed camping restriction is needed during these rain events to ensure PMV reproductive success. So far, no such demonstration has been made. As a result, the proposed camping closure in DBF should be removed from consideration.

The DRAMP proposes to eliminate camping on the east side of the ISDRA from Wash 25 to Wash 69. According to the RAMP, this closure is necessary to protect the microphyll woodland habitat that exists in this area. While we recognize the value in protecting this important

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habitat type, the proposed camping closure is too large and not supported by technical evidence. Specifically, there is no data showing that camping in the microphyll woodland has damaged the habitat or otherwise affected the species that use or reside in the habitat. The only evidence provided in support of the proposed closure is the PRBO Bird Study, attached as Appendix O to the RAMP. This study did not address camping impact; instead, it focused exclusively on OHV-related impacts. In addition, the Bird Study, by its own admission, is fraught

with methodological defects. (See discussion of Appendix O, below.) Moreover, the study's authors acknowledge that, although the microphyll woodland in the open area is not as dense as that in Wilderness Area, it nevertheless supports a great many birds species and is considered high value habitat, even with continued recreational use. The study also determined that the microphyll woodland in the Wilderness Area contained an unusually high number of birds, a finding which, according to the study's authors, may have been caused by surveyor error. For these reasons, it is unfair and scientifically misleading to suggest that the microphyll woodlands in the open area have somehow been damaged by recreational uses. There is no valid scientific data to support such the closure proposed in Alternative 8 of the RAMP. Please provide any relevant peer reviewed scientific data that would support such a closure. If no such data exists, the proposed camping closure at Washes 25 through 69 should be eliminated from further consideration.

In the Mammoth Wash area, the closure of critical habitat (CH) to OHVs will result in a barrier between the east and west side of the open areas, increasing the chance of incursions into the CH. To address this problem, BLM should establish two or three vehicle paths or corridors through this CH area to allow vehicles to travel between the east and west open areas. Without designated connecting corridors, OHVs may travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.

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In the south dunes adjacent to the DBF campground, the CH creates a barrier between the Sand Highway on the west and the open area on the east. This barrier may result in incursions through the CH. As in the Mammoth Wash area discussed above, this problem could be eliminated by establishing a couple of travel corridors through this CH area at selected locations. These will allow for vehicle connections between the sand highway and the east open area. In addition, the travel corridors would permit emergency vehicles to access the open areas. Without designated connecting corridors, OHVs may travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.

Comments on specific sections of the DRAMP

Page 1-2 Section 1.1.1

According to the RAMP/EIS, "*BLM seeks to provide a comprehensive*

management plan to . . . manage the Planning Area for recovery and delisting of the Peirson's milk-vetch (PMV; Astragalus magdalenae var. peirsonii) However, the RAMP/EIS does not explain what constitutes "recovery" of the PMV. As there is no Recovery Plan for this species, BLM and the United States Fish and Wildlife Service (FWS) should articulate some criteria which, if met, would indicate that the PMV has recovered and may be considered for delisting.

To the extent that BLM or FWS have identified recovery criteria for the PMV, please identify the technical data from which these criteria were derived.

There is no Environmental Species Act (ESA) requirement to close areas that the FWS has designated as CH for the PMV. Therefore, the RAMP/EIS must provide a rationale for closing all PMV CH to recreational use. That is, BLM must explain why the closures are necessary to the conservation and recovery of the species.

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Page 1-3 Section 1.2

The BLM states "*Although not a part of the ISD SRMA, this Limited Use Area ERMA is included as a part of the Planning Area.*"

If the " Extensive Recreation Management Area" (ERMA) around the ISDRA is governed by the "Northern and Eastern Colorado Desert Coordinated Management Plan" (NECO) , which route designation will hold sway, the NECO designation or the one proposed in the DRAMP? The legal route designations for the NECO area include the travel in navigable washes and the ability to camp within 300 feet of a designated route in the limited use areas of the NECO plan. Will these rights and restrictions be honored in the RAMP?

Will BLM be required to amend the NECO plan to ensure consistency with the RAMP?

Please explain if the navigable washes in the ERMA will continue to be available for OHV use. Also, will camping still be available within 300 feet of legal routes in this area?

Page 1-3 Section 1.2

Per this section a permit and a permit fee is required for the entire planning area, including the NECO ERMA. As there is no legal OHV access from this ERMA to the ISD "Special Recreation Management Plan" (SMRA), please explain how a fee can be charged for access to the ISD SRMA.

Also, as it is legal to recreate in the NECO without paying a recreation fee, please explain how visitors that are not recreating at the ISD SRMA will be excluded from the requirement to pay the ISD SRMA recreation fee.

Page 2-65 Section 2.3.14.3.2 (Limited RMZ)

"The Limited RMZ would be managed for its limited motorized recreational opportunities and for natural qualities. There are

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three potential types of limited opportunities in the RMZ. The Limited RMZ is also managed under the NECO and WECO plans where OHV travel is permitted on designated routes." The RAMP must add navigable washes to the list of places where OHV travel is allowed in the limited use area of the NECO plan.

Page 2-68 Section 2.3.14.4 (Limited Areas)

This section quotes the "California Desert Conservation Plan' (CDCA), which allows camping within 300 feet of the centerline of a route in Limited Use areas. Does this CDCA camping policy apply to the Ted Kipf Imperial County road? If not, please explain why not?

Ted Kipf road is listed in Table 2-15 as a route of travel. As this area may see increased camping use with any the periodic closure of the Dunebuggy Flats campground, the RAMP should clearly state that camping is allowed along this route.

Page 3-148 Section 3.18.4.3 On-Site Vendors

This section describes the on-site vendor situation as it currently exists. The vendor definitions are those contained in the 2003 RAMP.

Appendix C seems to list vending requirements but is described as "Typical Management Actions and Best Management Practices" however this seems to be just boiler plate and does not seem to be actual requirements.

The RAMP does not describe the requirements for on-site vending; nor does it address the concerns of the existing vendors which have been expressed to BLM over the last six years.

Does the RAMP itself regulate on-site vending or do the district managers delegate that regulatory authority, through the RAMP, to the local field office?

If the on-site vendor regulations are designated at the local district

level, that fact should be disclosed in the RAMP document. On the other hand, if these on-site vendor regulations

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are designated by the RAMP, as was done in the 2003 RAMP document, then this RAMP should include a more detailed description of those regulations.

The vendor regulations from the 2003 RAMP were designed to address and control the ability of seasonal vendors to take business away from year-round local businesses. This is no longer a problem. The local businesses have set up locations on their private property to allow for seasonal vending. This negates the argument that the seasonal vendors on BLM land diminish the sales realized by local businesses.

BLM should adjust the 2003 vendor regulations so that vendors on BLM land can occupy their concessions without having to move off-site each week. As an alternative, BLM could expand the full-time vending locations to include Buttercup. This would be similar to the full-time location at the intersection of Gecko Road and Highway 78, and would be assigned via a lottery system.

Appendix D Page D-4 Table D-1

Vehicle Counters

Please explain why the vehicle counters at some locations were omitted from this analysis. There are vehicle counters at Glamis Flats, Osborne Overlook and Dunebuggy Flats that should be included in the monitoring of visitor use patterns. This is critical given that each of these three areas will likely see significant changes in visitorship following implementation of any camping closure at Dunebuggy Flats, as contemplated under Alternative 8.

Appendix O

Photo at Page 8, Figure 3: This photograph has no business in this document. It is not germane to the discussion of bird monitoring at the ISD and is an inflammatory depiction of illegal OHV recreation. Moreover, it depicts a location that is not even within the ISDRA. Finally, there is no way to substantiate that this is fact illegal OHV operation. By including this photograph in the bird report, the authors betray an inherent bias against OHV

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activity, which in turn renders the study's analysis and conclusions

suspect.

On Page 18 of the study, the authors indicate that they had "severe problems" with key aspects of their analysis, including:

- o Heaping (low frequencies of detections close to the observer, with much higher frequencies at specific distances for each bird species);
- o Small sample sizes; and
- o Surveyor tendency to mis-record distances.

As a result of the problems, "abundance estimates based on estimates of detectability were not helpful in relating patterns of abundance to covariates in the study area." (Page 18) This inability to discern patterns of abundance largely eviscerates the entire bird study and its conclusions.

Ultimately, the RAMP/EIS should be careful **not** to rely heavily on the bird study for assertions that OHV use reduces bird abundance and diversity in the microphyll woodlands of the east dunes. The study itself cautions against drawing such conclusions: "Although we have found significantly more breeders and migrants at non-OHV use sites within the North Algodones Dunes Wilderness, these differences should not be assumed to result from recreation pressure alone. Rather, the habitat within the North Algodones Dunes Wilderness may simply be of higher quality than habitat outside the Wilderness." (Page 19)

In addition, the authors of the bird study could not fully explain why the surveyors detected so many birds in the dunes wilderness. According to pages 20 and 21 of the report, the habitat parameters of the wilderness, while quite good, did not suggest that the bird numbers would be unusually high. The authors were of the opinion that surveyors counted many *juvenile* birds as adults, thus skewing the numbers. If this is true, then the comparison between the *wilderness* microphyll woodland and the *open area* microphyll woodland, at least on the question of bird abundance and diversity, is invalid.

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Appendix D (Precipitation Monitoring)

- o At page D-8, this documents states that *"BLM would monitor rainfall to assess the likelihood of PMV germination, and to determine whether the rainfall threshold is met (1.82 inches of rainfall during the months of October, November and December) that would trigger the closure of the Dunebuggy Flats campground. The closure of the Dunebuggy Flats campground in high rainfall years would add an additional layer of protection to allow PMV to germinate and set seed, thereby aiding in*

recovery of the species." Nowhere, however, does the document explain the significance of the 1.82 inch rain threshold in terms of PMV germination or reproductive success. Likewise, the document does not explain why a camping closure, if imposed once the 1.82 rain threshold is met, will aid in the conservation and/or recovery of the PMV. Without such explanations, and without supporting technical data, the proposed rain threshold and attendant camping closure are completely arbitrary.

- o If the intent is to have increased protection to the already closed CH areas perhaps increased law enforcement in these critical areas would be justified. The increased law enforcement costs could be paid for with the revenue that would have been lost by closing the campground. Increased closure signage would go a long way to preventing the inadvertent incursions that this campground closure seems to be trying to prevent.

- o Please evaluate increased signage and law enforcement of closed CH areas rather than closing of recreation camping areas to provide your implied extra protection of the PMV.

- o Also please take into account that throughout this document almost all credible studies consistently show that less than one percent of monitored plants are damaged by OHV operation. This statistic is consistent for monitoring of PMV (Page H-2, H-3 and H-6) and Algodones Dunes Sunflower (Page H-4, Section A.2).

- o Data from other referenced studies show that many plants consistently show increased levels in areas open to OHV recreation. This has been shown in the BLM PMV monitoring and the Luckenbach and Bury report on page H-8. Quoting this report *"...that data were collected showed that PMV density and*

9

cover were actually higher in the OHV area than in the closed area...

- o It seems that neither the BLM nor FWS can explain why these plants seem to do as well in areas open to OHV than in areas closed to OHV recreation.

- o Data such as this would question the advisability and need to restrict camping in areas adjacent to the proposed closed areas

Debi Trent

poledanzer@hotmail.com

760-723-0128

From: Gary@maricopametals.com
To: caisdrmp@ca.blm.gov
Subject: Dune closures and restrictions
Date: 07/26/2010 11:29 AM
Attachments: [BLM - Erin Dreyfuss.doc](#)

Hello Erin,
Please see attached letter which I strongly agree with.

Thank you,

Gary A. Heidemann
Vice President
MARICOPA METALS, INC.
Helping build the southwest since 1963
602-437-0276
602-437-0281 fax
www.maricopametals.com

Erin Dreyfuss,

After reviewing the draft Imperial Sand Dune Recreation Management Plan, I am emailing you the following comments, please address any response to my information at the end of the comments.

- This draft document does not include all the available documentation on the status of the *Astragalus magdalenae* var. *peirsonii* (PMV). All the available scientific documents about the PMV should be included in this Draft Recreation Management Plan (DRAMP), as the primary restrictions on recreation proposed in this document is based on the presence of the PMV in the recreation area. Therefore ALL pertinent information that has been published on the PMV must be included to allow the public to make an informed decision on the validity of the claims and on Bureau of Land Management's (BLM) proposed restrictions on recreation.

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not as dense as that in Wilderness Area, it nevertheless supports a great many birds species and is considered high value habitat, even with continued recreational use. The study also determined that the microphyll woodland in the Wilderness Area contained an unusually high number of birds, a finding which, according to the study's authors, may have been caused by surveyor error. For these reasons, it is unfair and scientifically misleading to suggest that the microphyll woodlands in the open area have somehow been damaged by recreational uses. There is no valid scientific data to support such the closure proposed in Alternative 8 of the RAMP. Please provide any relevant peer reviewed scientific data that would support such a closure. If no such data exists, the proposed camping closure at Washes 25 through 69 should be eliminated from further consideration.

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• **Appendix D Page D-4 Table D-1**

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Gary A. Heidemann
Vice President
MARICOPA METALS, INC.
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602-437-0276
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From: [Scott Sappington](#)
To: caisdrmp@ca.blm.gov
Subject: Comments to the Imperial Sand Dune Recreation Management Plan.
Date: 07/26/2010 10:26 AM

Erin Dreyfuss,

After reviewing the draft Imperial Sand Dune Recreation Management Plan, I am emailing you the following comments, please address any response to my information at the end of the comments.

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nevertheless supports a great many birds species and is considered high value habitat, even with continued recreational use. The study also determined that the microphyll woodland in the Wilderness Area contained an unusually high number of birds, a finding which, according to the study's authors, may have been caused by surveyor error. For these reasons, it is unfair and scientifically misleading to suggest that the microphyll woodlands in the open area have somehow been damaged by recreational uses. There is no valid scientific data to support such the closure proposed in Alternative 8 of the RAMP. Please provide any relevant peer reviewed scientific data that would support such a closure. If no such data exists, the proposed camping closure at Washes 25 through 69 should be eliminated from further consideration.

In the Mammoth Wash area, the closure of critical habitat (CH) to OHVs will result in a barrier between the east and west side of the open areas, increasing the chance of incursions into the CH. To address this problem, BLM should establish two or three vehicle paths or corridors through this CH area to allow vehicles to travel between the east and west open areas. Without designated connecting corridors, OHVs may travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.

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In the south dunes adjacent to the DBF campground, the CH creates a barrier between the Sand Highway on the west and the open area on the east. This barrier may result in incursions through the CH. As in the Mammoth Wash area discussed above, this problem could be eliminated by establishing a couple of travel corridors through this CH area at selected locations. These will allow for vehicle connections between the sand highway and the east open area. In addition, the travel corridors would permit emergency vehicles to access the open areas. Without designated connecting corridors, OHVs may travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.

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4

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The BLM states *"Although not a part of the ISD SRMA, this Limited Use Area ERMA is included as a part of the Planning Area."*

If the " Extensive Recreation Management Area" (ERMA) around the ISDRA is governed by the "Northern and Eastern Colorado Desert Coordinated Management Plan" (NECO) , which route designation will hold sway, the NECO designation or the one proposed in the DRAMP? The legal route designations for the NECO area include the travel in navigable washes and the ability to camp within 300 feet of a designated route in the limited use areas of the NECO plan. Will these rights and restrictions be honored in the RAMP?

Will BLM be required to amend the NECO plan to ensure consistency with the RAMP?

Please explain if the navigable washes in the ERMA will continue to be available for OHV use. Also, will camping still be available within 300 feet of legal routes in this area?

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Page 2-65 Section 2.3.14.3.2 (Limited RMZ)

"The Limited RMZ would be managed for its limited motorized recreational opportunities and for natural qualities. There are

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three potential types of limited opportunities in the RMZ. The Limited RMZ is also managed under the NECO and WECO plans where OHV travel is permitted on designated routes." The RAMP must add navigable washes to the list of places where OHV travel is allowed in the limited use area of the NECO plan.

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Does the RAMP itself regulate on-site vending or do the district managers delegate that regulatory authority, through the RAMP, to the local field office?

If the on-site vendor regulations are designated at the local district level, that fact should be disclosed in the RAMP document. On the other hand, if these on-site vendor regulations

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are designated by the RAMP, as was done in the 2003 RAMP document, then this RAMP should include a more detailed description of those regulations.

The vendor regulations from the 2003 RAMP were designed to address and

control the ability of seasonal vendors to take business away from year-round local businesses. This is no longer a problem. The local businesses have set up locations on their private property to allow for seasonal vending. This negates the argument that the seasonal vendors on BLM land diminish the sales realized by local businesses.

BLM should adjust the 2003 vendor regulations so that vendors on BLM land can occupy their concessions without having to move off-site each week. As an alternative, BLM could expand the full-time vending locations to include Buttercup. This would be similar to the full-time location at the intersection of Gecko Road and Highway 78, and would be assigned via a lottery system.

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Vehicle Counters

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activity, which in turn renders the study's analysis and conclusions suspect.

On Page 18 of the study, the authors indicate that they had "severe problems" with key aspects of their analysis, including:

- Heaping (low frequencies of detections close to the observer, with much higher frequencies at specific distances for each bird species);
- Small sample sizes; and
- Surveyor tendency to mis-record distances.

As a result of the problems, “abundance estimates based on estimates of detectability were not helpful in relating patterns of abundance to covariates in the study area.” (Page 18) This inability to discern patterns of abundance largely eviscerates the entire bird study and its conclusions.

Ultimately, the RAMP/EIS should be careful **not** to rely heavily on the bird study for assertions that OHV use reduces bird abundance and diversity in the microphyll woodlands of the east dunes. The study itself cautions against drawing such conclusions: “Although we have found significantly more breeders and migrants at non-OHV use sites within the North Algodones Dunes Wilderness, these differences should not be assumed to result from recreation pressure alone. Rather, the habitat within the North Algodones Dunes Wilderness may simply be of higher quality than habitat outside the Wilderness.” (Page 19)

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8

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- At page D-8, this documents states that *“BLM would monitor rainfall to assess the likelihood of PMV germination, and to determine whether the rainfall threshold is met (1.82 inches of rainfall during the months of October, November and December) that would trigger the closure of the Dunebuggy Flats campground. The closure of the Dunebuggy Flats campground in high rainfall years would add an additional layer of protection to allow PMV to germinate and set seed, thereby aiding in recovery of the species.”* Nowhere, however, does the document explain the significance of the 1.82 inch rain threshold in terms of PMV germination or reproductive success. Likewise, the document does not explain why a camping closure, if imposed once the 1.82 rain threshold is met, will aid in the conservation and/or recovery of the PMV. Without such explanations, and without supporting technical data, the proposed rain threshold and attendant camping closure are completely arbitrary.

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Sincerely,

Scott Sappington
ssappington@prosteelerectors.net



6714 West Frier Dr
Ste 104
Glendale AZ 85303
623-825-3078

From: [Tara Krantz](#)
To: caisdrmp@ca.blm.gov
Subject: Dune Closures
Date: 07/26/2010 10:50 AM

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Thank you in advance,

Tara Krantz

Pro Steel Erectors II INC
6714 W Frier Dr Ste 104
Glendale, AZ 85303

p 623-825-3078

f 623-561-5062

From: alyshka@aol.com
To: caisdrmp@ca.blm.gov
Subject: ISDRA DRAMP Comments
Date: 08/06/2010 07:38 PM

ISDRA DRAMP comments August 6, 2010

First of all I would to thank all BLM personal for doing such a good job at managing The ISDRA. I am a avid user of our public lands backpacking in Wilderness areas, exploring new areas, (big thumbs up on the signs to the Luner Crater in Nevada) Sking/snowboarding, and offroading.

The ISDRA is great place to take my family for some quality time together. We spend close to 70 days a year camping in the ISDRA mostly along Wash Road. Resolving the Wash Road problem in a timely matter was quite impressive, but with the new road comes more people. Over the years we have steadily been moving down the road from lower numbers to higher numbers to stay away from the crowds. The closure of any wash to camping would diminish our camping experience at the ISDRA.

As more and more land is designated Wilderness, National Conservation Area or National Monuments, the ISDRA has and will become more crowded. Thus affecting the over all experience of the area, so any and all closures with in the ISDRA will push more people into smaller areas diminishing the outdoor experience.

What I don't understand is why the ISDRA needs to be open to renewable energy. With millions and millions of acres of new wilderness and millions more in the planing stage being closed to renewable energy.

Why is it that a world class recreation area of less than 200,000 acres and has over a million visitors a year can't be excluded from from renewable energy?

When I attened the U.S. Fish & Wildlife Critical Habitat for Peirson's Milk-vetch meetings in 2007 I was surprised to learn that the PMV numbers in the open areas of the ISDRA were greater than in the closed areas. (federal register/ vol.72, No.144/ Friday, July 27, 2007/ Proposed rules).

I had excepted that the number of PMV in the wilderness area to be much higher that in the closed area. Common Sense tells me there is no need to close areas to off roaders and muptible studys prove it.

This draft document does not include all the available documentation on the status of the *Astragalus magdalenae* var. *peirsonii* (PMV). All the available scientific documents about the PMV should be included in this Draft Recreation Management Plan (DRAMP), as the primary restrictions on recreation proposed in this document is based on the presence of the PMV in the recreation area. Therefore ALL pertinent information that has been published on the PMV must be included to allow the public to make an informed decision on the validly of the claims and on Bureau of Land

Management's (BLM) proposed restrictions on recreation.

The DRAMP proposes to restrict camping in Dunebuggy Flats (DBF) when a certain rainfall threshold is met, presumably to provide additional protection for the PMV. However, neither the camping closure nor the rain threshold which would trigger it are supported by technical studies or related data. A proposed camping restriction of this magnitude must have some scientific basis before it can be considered for adoption and implementation. For example, BLM must demonstrate why it believes the proposed rainfall threshold is correlated to increased PMV production. Likewise, BLM must demonstrate why it believes the proposed camping restriction is needed during these rain events to ensure PMV reproductive success. So far, no such demonstration has been made. As a result, the proposed camping closure in DBF should be removed from consideration.

The DRAMP proposes to eliminate camping on the east side of the ISDRA from Wash 25 to Wash 69. According to the RAMP, this closure is necessary to protect the microphyll woodland habitat that exists in this area. While we recognize the value in protecting this important habitat type, the proposed camping closure is too large and not supported by technical evidence. Specifically, there is no data showing that camping in the microphyll woodland has damaged the habitat or otherwise affected the species that use or reside in the habitat. The only evidence provided in support of the proposed closure is the PRBO Bird Study, attached as Appendix O to the RAMP. This study did not address camping impact; instead, it focused exclusively on OHV-related impacts. In addition, the Bird Study, by its own admission, is fraught with methodological defects. (See discussion of Appendix O, below.) Moreover, the study's authors acknowledge that, although the microphyll woodland in the open area is not as dense as that in Wilderness Area, it nevertheless supports a great many birds species and is considered high value habitat, even with continued recreational use. The study also determined that the microphyll woodland in the Wilderness Area contained an unusually high number of birds, a finding which, according to the study's authors, may have been caused by surveyor error. For these reasons, it is unfair and scientifically misleading to suggest that the microphyll woodlands in the open area have somehow been damaged by recreational uses. There is no valid scientific data to support such the closure proposed in Alternative 8 of the RAMP. Please provide any relevant peer reviewed scientific data that would support such a closure. If no such data exists, the proposed camping closure at Washes 25 through 69 should be eliminated from further consideration.

In the Mammoth Wash area, the closure of critical habitat (CH) to OHVs will result in a barrier between the east and west side of the open areas, increasing the chance of incursions into the CH. To address this problem, BLM should establish two or three vehicle paths or corridors

through this CH area to allow vehicles to travel between the east and west open areas. Without designated connecting corridors, OHVs may travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.

3

In the south dunes adjacent to the DBF campground, the CH creates a barrier between the Sand Highway on the west and the open area on the east. This barrier may result in incursions through the CH. As in the Mammoth Wash area discussed above, this problem could be eliminated by establishing a couple of travel corridors through this CH area at selected locations. These will allow for vehicle connections between the sand highway and the east open area. In addition, the travel corridors would permit emergency vehicles to access the open areas. Without designated connecting corridors, OHVs may travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.

Comments on specific sections of the DRAMP

Page 1-2 Section 1.1.1

According to the RAMP/EIS, "*BLM seeks to provide a comprehensive management plan to . . . manage the Planning Area for recovery and delisting of the Peirson's milk-vetch (PMV; Astragalus magdalenae var. peirsonii)* However, the RAMP/EIS does not explain what constitutes "recovery" of the PMV. As there is no Recovery Plan for this species, BLM and the United States Fish and Wildlife Service (FWS) should articulate some criteria which, if met, would indicate that the PMV has recovered and may be considered for delisting.

To the extent that BLM or FWS have identified recovery criteria for the PMV, please identify the technical data from which these criteria were derived.

There is no Environmental Species Act (ESA) requirement to close areas that the FWS has designated as CH for the PMV. Therefore, the RAMP/EIS must provide a rationale for closing all PMV CH to recreational use. That is, BLM must explain why the closures are necessary to the conservation and recovery of the species.

4

Page 1-3 Section 1.2

The BLM states "*Although not a part of the ISD SRMA, this Limited Use Area ERMA is included as a part of the Planning Area.*"

If the " Extensive Recreation Management Area" (ERMA) around the ISDRA is governed by the "Northern and Eastern Colorado Desert Coordinated Management Plan" (NECO) , which route designation will hold sway, the NECO designation or the one proposed in the DRAMP? The legal route designations for the NECO area include the travel in navigable washes and the ability to camp within 300 feet of a designated route in the limited use areas of the NECO plan. Will these rights and restrictions be honored in the RAMP?

Will BLM be required to amend the NECO plan to ensure consistency with the RAMP?

Please explain if the navigable washes in the ERMA will continue to be available for OHV use. Also, will camping still be available within 300 feet of legal routes in this area?

Page 1-3 Section 1.2

Per this section a permit and a permit fee is required for the entire planning area, including the NECO ERMA. As there is no legal OHV access from this ERMA to the ISD "Special Recreation Management Plan" (SMRA), please explain how a fee can be charged for access to the ISD SRMA.

Also, as it is legal to recreate in the NECO without paying a recreation fee, please explain how visitors that are not recreating at the ISD SRMA will be excluded from the requirement to pay the ISD SRMA recreation fee.

Page 2-65 Section 2.3.14.3.2 (Limited RMZ)

"The Limited RMZ would be managed for its limited motorized recreational opportunities and for natural qualities. There are

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three potential types of limited opportunities in the RMZ. The Limited RMZ is also managed under the NECO and WECO plans where OHV travel is permitted on designated routes." The RAMP must add navigable washes to the list of places where OHV travel is allowed in the limited use area of the NECO plan.

Page 2-68 Section 2.3.14.4 (Limited Areas)

This section quotes the "California Desert Conservation Plan" (CDCA), which allows camping within 300 feet of the centerline of a route in Limited Use areas. Does this CDCA camping policy apply to the Ted Kipf Imperial County road? If not, please explain why not?

Ted Kipf road is listed in Table 2-15 as a route of travel. As this area may see increased camping use with any the periodic closure of the Dunebuggy Flats campground, the RAMP should clearly state that camping is allowed along this route.

Page 3-148 Section 3.18.4.3 On-Site Vendors

This section describes the on-site vendor situation as it currently exists. The vendor definitions are those contained in the 2003 RAMP.

Appendix C seems to list vending requirements but is described as "Typical Management Actions and Best Management Practices" however this seems to be just boiler plate and does not seem to be actual

requirements.

The RAMP does not describe the requirements for on-site vending; nor does it address the concerns of the existing vendors which have been expressed to BLM over the last six years.

Does the RAMP itself regulate on-site vending or do the district managers delegate that regulatory authority, through the RAMP, to the local field office?

If the on-site vendor regulations are designated at the local district level, that fact should be disclosed in the RAMP document. On the other hand, if these on-site vendor regulations

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are designated by the RAMP, as was done in the 2003 RAMP document, then this RAMP should include a more detailed description of those regulations.

The vendor regulations from the 2003 RAMP were designed to address and control the ability of seasonal vendors to take business away from year-round local businesses. This is no longer a problem. The local businesses have set up locations on their private property to allow for seasonal vending. This negates the argument that the seasonal vendors on BLM land diminish the sales realized by local businesses.

BLM should adjust the 2003 vendor regulations so that vendors on BLM land can occupy their concessions without having to move off-site each week. As an alternative, BLM could expand the full-time vending locations to include Buttercup. This would be similar to the full-time location at the intersection of Gecko Road and Highway 78, and would be assigned via a lottery system.

Appendix D Page D-4 Table D-1

Vehicle Counters

Please explain why the vehicle counters at some locations were omitted from this analysis. There are vehicle counters at Glamis Flats, Osborne Overlook and Dunebuggy Flats that should be included in the monitoring of visitor use patterns. This is critical given that each of these three areas will likely see significant changes in visitorship following implementation of any camping closure at Dunebuggy Flats, as contemplated under Alternative 8.

Appendix O

Photo at Page 8, Figure 3: This photograph has no business in this document. It is not germane to the discussion of bird monitoring at the ISD and is an inflammatory depiction of illegal OHV recreation. Moreover, it depicts a location that is not even within the ISDRA. Finally, there is no way to substantiate that this is fact illegal OHV operation. By including this photograph in the bird report, the authors betray an inherent bias against OHV

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activity, which in turn renders the study's analysis and conclusions suspect.

On Page 18 of the study, the authors indicate that they had "severe

problems" with key aspects of their analysis, including:

- o Heaping (low frequencies of detections close to the observer, with much higher frequencies at specific distances for each bird species);
- o Small sample sizes; and
- o Surveyor tendency to mis-record distances.

As a result of the problems, "abundance estimates based on estimates of detectability were not helpful in relating patterns of abundance to covariates in the study area." (Page 18) This inability to discern patterns of abundance largely eviscerates the entire bird study and its conclusions.

Ultimately, the RAMP/EIS should be careful **not** to rely heavily on the bird study for assertions that OHV use reduces bird abundance and diversity in the microphyll woodlands of the east dunes. The study itself cautions against drawing such conclusions: "Although we have found significantly more breeders and migrants at non-OHV use sites within the North Algodones Dunes Wilderness, these differences should not be assumed to result from recreation pressure alone. Rather, the habitat within the North Algodones Dunes Wilderness may simply be of higher quality than habitat outside the Wilderness." (Page 19)

In addition, the authors of the bird study could not fully explain why the surveyors detected so many birds in the dunes wilderness. According to pages 20 and 21 of the report, the habitat parameters of the wilderness, while quite good, did not suggest that the bird numbers would be unusually high. The authors were of the opinion that surveyors counted many *juvenile* birds as adults, thus skewing the numbers. If this is true, then the comparison between the *wilderness* microphyll woodland and the *open area* microphyll woodland, at least on the question of bird abundance and diversity, is invalid.

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Appendix D (Precipitation Monitoring)

- o At page D-8, this documents states that *"BLM would monitor rainfall to assess the likelihood of PMV germination, and to determine whether the rainfall threshold is met (1.82 inches of rainfall during the months of October, November and December) that would trigger the closure of the Dunebuggy Flats campground. The closure of the Dunebuggy Flats campground in high rainfall years would add an additional layer of protection to allow PMV to germinate and set seed, thereby aiding in recovery of the species."* Nowhere, however, does the document explain the significance of the 1.82 inch rain threshold in terms of PMV germination or reproductive success. Likewise, the document does not explain why a camping closure, if imposed once the 1.82 rain threshold is met, will aid in the conservation and/or recovery of the PMV. Without such explanations, and without supporting technical data, the proposed rain threshold and attendant camping closure are completely arbitrary.
- o If the intent is to have increased protection to the already closed CH areas perhaps increased law enforcement in these critical areas would be justified. The increased law enforcement costs could be paid for with the revenue that would have been lost by closing the campground. Increased

closure signage would go a long way to preventing the inadvertent incursions that this campground closure seems to be trying to prevent.

- o Please evaluate increased signage and law enforcement of closed CH areas rather than closing of recreation camping areas to provide your implied extra protection of the PMV.

- o Also please take into account that throughout this document almost all credible studies consistently show that less than one percent of monitored plants are damaged by OHV operation. This statistic is consistent for monitoring of PMV (Page H-2, H-3 and H-6) and Algodones Dunes Sunflower (Page H-4, Section A.2).

- o Data from other referenced studies show that many plants consistently show increased levels in areas open to OHV recreation. This has been shown in the BLM PMV monitoring and the Luckenbach and Bury report on page H-8. Quoting this report *"...hat data were collected showed that PMV density and*

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cover were actually higher in the OHV area than in the closed area...

- o It seems that neither the BLM nor FWS can explain why these plants seem to do as well in areas open to OHV than in areas closed to OHV recreation.

- o Data such as this would question the advisability and need to restrict camping in areas adjacent to the proposed closed areas

Thank You for taking the time to read and consider my comments.

Robert Hancock
pobox 460553
Escondido CA 92046

From: [Bill White](#)
To: caisdrmp@ca.blm.gov
Cc: ['White, Bill'](#)
Subject: ISDRA DRAMP Comments
Date: 08/05/2010 09:34 PM
Attachments: [Cover Ltr.doc](#)
[DRAMP Comment Attachment.doc](#)

Please see the cover letter with attached comments. Please verify receipt of this e-mail.
Thanks you very much,

Bill White Jr.

From: [Mark C. Dietrich](#)
To: caisdrmp@ca.blm.gov
Subject: Draft Imperial Sand Dune Recreation Management Plan (DRAMP)
Date: 08/05/2010 09:14 AM

Erin Dreyfuss
BLM,

As a duner (since 1999), I have enjoyed the dunes in machines, trailer camping and on long hikes into the restricted areas north of Ogilby Camp Ground. The Dunes deserve to be enjoyed both ways. With that said, I endorse the position of ASA as it relates to the DRAMP. Thank you.

Mark C. Dietrich
Senior Principal Engineer
SDB-II AF IPT Lead, Tactical Systems Mechanical Design
Raytheon Missile Systems

520-663-8483 office
520-489-6507 pager
520-471-3353 cell
520-663-7777 fax
mcdietrich@raytheon.com

From: [Michael Haines](#)
Reply To: michaelhaines.ca@sbcglobal.net
To: caisdrmp@ca.blm.gov
Subject: Protect the Algodones Dunes
Date: 08/05/2010 03:23 PM

Let's preserve the Algodones Dunes, they are an important part of our natural heritage.

Thank you.

Michael Haines
Null
San Rafael, CA 94901
USA

From: joeyhergatt@cox.net
To: caisdrmp@ca.blm.gov
Subject: Glamis dunes closures
Date: 08/05/2010 11:06 AM

Hello,
I wanted to voice to you my opinion on closing areas at glamis. Its not just us riding around emission spitting machines, its about being with everyone and having good times. We already try pretty hard to cut down on emissions to try and keep the land that is offered to us for fees that we pay every time we try and visit, but when you close land that's less space for us to camp and hang out and ride comfortably. When that happens either people dont want to go to that area anymore, or they cram into places making it sort of uncomfortable, sometimes unsafe, and inefficient becuase most are there to ride. I dont know if you know or not, but all the equipment we buy is a multibillion dollar business, and unless you're gonna be stimulating the economy out of your own pockets, I dont think our economy can really afford to lose our sport and business. Just try and think about what I said a little. thanks for your time,
Joseph Michael Hergatt
623 East Lowell Ave
Gilbert, AZ
85296

From: [Bill Black](#)
To: caisdrmp@ca.blm.gov
Subject: Imperial Sand Dunes
Date: 08/05/2010 10:58 AM

Dear Erin Dreyfuss,

My family and I have been enjoying the Glamis sand dunes for many years. I first started going there in the early '80s (Wow has it been that long 30 years, scary), when there were no closures (south of highway 78) and not too many people as compared to today. Indeed with the increasing number of people enjoying and recreating this great place it needs to have rules and management to keep things in order and maintain its recreating usefulness.

I started with a truck and 3 wheeler, today a motor home w/trailer and sand car (still have the old wheeler too). As the number of visitors has increased and the OHV's (of all types) has grown it is necessary to increase the usage space to accommodate. What would work the best (for me and if I may, the majority of recreation enthusiast) is to:

- a) have more efficient access to and from camping areas for RV's
- b) have improved camping areas (more hard pack adjacent to Gecko road)
- c) more open space for riding to prevent congestion to and from the limited destination points

It is always good to have ideas on how maintain order for the users of the dunes. It should be managed for the type of user not to define the user. I hike and camp in the San Bernardino Mountains often and the land is managed for it. I buy required permit(s) and enjoy the walk. The sand dunes should be the same. We should be able to use the land for what the public is actually using it for, within reason of course. You do not see sand dune cars in the mountains nor hikers in the sand for a reason...it's not practical.

Certainly we have the BLM to provide direction to which support and manage the public's reasonable use of the land.

Kind regards,

Bill Black
Escondido, CA
760-803-6501

From: vincent_barbarino
To: caisdrmp@ca.blm.gov
Subject: ISDRA DRAMP Comments
Date: 08/05/2010 08:33 AM

I have reviewed some comments that the ASA has on their web site and have cut and pasted the ones that best state what I feel is important. Please don't assume that my "cut and pasted" comments are in any way less important than ones that I could have written on my own.

In preparing the DRAMP, BLM has apparently made a decision to ignore, been requested to ignore at higher levels within BLM or by another agency, or simply overlooked a large body of information and data on the distribution, ecology, and biology of PMV. ASA- sponsored research was detailed in reports issued annually from 2001-2007. Only the first of these reports, called "TOA 2001," is acknowledged (p. H-6). I strongly recommended that the other six reports be read by appropriate BLM personnel and the information therein be incorporated in the DRAMP.

The preferred alternative, Alt. 8, calls for closure of all areas designated as Critical Habitat (CH) for PMV by FWS. This includes an area of the north dunes north of the wilderness area, the wilderness area, an area from the central dunes southward nearly to I-8, and a small area near the border south of I-8. The large proposed central dunes closure is irregular in shape, and includes several narrow "peninsulas" extending eastward from the main body of the closure. There is a break at the southern end with a disconnected area to the south.

Marking such an area on the ground would be a difficult task, and the narrow peninsulas would be extremely confusing. The lack of pass-throughs for miles and miles would make entry into the open area to the east difficult. This would be confusing to both recreationist and law enforcement.

As an alternative to the CH closures proposed in Alt. 8, I propose a smoothed boundary around the main body of the CH, eliminating the peninsulas from closures. Unlike the temporary closures, the boundaries should follow the morphology of the dunes, in the interest of safety and clarity. This would not need to be as wide as the closures in Alt. 5 and 7, because the eastern third to half of those areas is beyond the CH boundary and without significant PMV populations.

Clearly marked pass-through routes should be established every half-mile to mile along the central closure to allow OHVs to access open areas to the east from the Sand Highway and remove the temptation to cross the closed area. It will not be difficult to locate areas that can be safely traversed without PMV; lateral sand ridges are frequent in the area and are currently used without affecting any PMV plants. This will also eliminate the necessity of rainfall-induced closure of DBF, as the temptation to closed CH area will be reduced by having regularly distributed designated crossings. The boundaries of the closure and the pass-throughs should be clearly marked and maintained.

- The DRAMP proposes to restrict camping in Dunebuggy Flats (DBF) when a certain rainfall threshold is met, presumably to provide additional protection for the PMV. However, neither the camping closure nor the rain threshold which would trigger it are supported by technical studies or related data. A proposed camping restriction of this magnitude must have some scientific basis before it can be considered for adoption and implementation. For example, BLM must demonstrate why it believes the proposed rainfall threshold is correlated to increased PMV production. Likewise, BLM must demonstrate why it believes the proposed camping restriction is needed during these rain events to ensure PMV reproductive success. So far, no such demonstration has been made. As a result, the proposed camping closure in DBF should be removed from consideration.

From: [Thomas Gyder](#)
To: caisdrmp@ca.blm.gov
Cc: [Thomas Gyder](#)
Subject: Draft Imperial Sand Dune Recreation Management Plan (DRAMP)
Date: 08/05/2010 07:35 AM

Erin Dreyfuss
BLM,

As a duner (since 1980) and a wilderness back country hiker (since 1976), I have enjoyed the dunes in machines, trailer camping and on long hikes into the restricted areas north of Ogilby Camp Ground. The Dunes deserve to be enjoyed both ways. With that said, I endorse the position of ASA as it relates to the DRAMP. Thank you.

Thom Gyder
8241 Grand Ave. Peoria, AZ 85345
thom47@mac.com
602-762-4363

Final ASA Comments can be viewed [here](#)

From: partycru@aol.com
To: caisdrmp@ca.blm.gov
Subject: Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Recreation Area (ISDRA)
Date: 08/05/2010 01:43 AM

To Whom it may concern,

I am a member of the ASA and have been going to the Imperial Sand dunes recreation area with my friends and family for over 20 years. I agree with the letter below from Bob Mason and I have the same concerns as he does regarding the March 2010 Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Recreation Area (ISDRA). I hope that you consider these concerns before any final decisions are made.

Thank You for your time.

Sincerely,

James Lewis
3938 W Camino Acequia
Phx. Az. 85051
602 290 0307

http://files.americansandassociation.org/files/2010%20RAMP/DRAMP_Comment_ASA_Cover_Letter.pdf

President Bob Mason **Board of Directors** Bob Gagliano - Secretary

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Vincent Brunasso

Grant George

Executive Director

Nicole Nicholas Gilles

Subject:

Comments on the March 2010 Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Recreation Area (ISDRA)

Dear RAMP Team Leader

Of the alternatives discussed in the DEIS, the American Sand Association (ASA) prefers Alternative 1. However, the ASA believes that some of the other alternatives, notably Alternatives 7 and 8 each have attractive features which could be combined into a potentially effective hybrid. Realigning the irregular boundaries of the Alternative 8 proposed *Astragalus magdalenae* var. *peirsonii* (PMV) critical habitat (CH) closures, increased signage and law enforcement during exceptional rainfall years along with clearly marked pass-through routes would provide a more manageable alternative.

The ASA respectfully requests that Bureau of Land Management (BLM) consider and assess such an alternative in the Final EIS. The ASA's support of a hybrid alternative will depend

on the features that alternative would contain and the impacts it would create. The proposed consideration of "hybrid" alternative is provided in response to the last sentence on the first page of DRAMP "Abstract" which states ***"The proposed decisions under this alternative (# 8) could be identical to those under one of the other alternatives presented or could be a combination of the features from several of the alternatives."***

The DRAMP has serious deficiencies. Specifically numerous proposed actions and recommendations are not supported by data germane to the proposal. The DRAMP is fraught with **superficial** and **incomplete** data particularly in the coverage of the biology and ecology of the PMV. The BLM has chosen to ignore a large body of published information and data regarding the distribution and ecology of the PMV. This omission renders many of the DRAMP recommendations invalid. August 4, 2010

Volume II of the DRAMP and the DEIS includes several maps that among other things define the "OHV Management Areas" for the proposed alternatives. These maps do not provide sufficient detail to allow the public to comment on the proposed alternatives. BLM publishes the latitude and longitude coordinates for the camp grounds and places of interest at the ISD. Without similar coordinates for the boundaries of the proposed closures the public cannot evaluate the impact on OHV activity and make meaningful comments. The BLM has a formidable task in preparing the DEIS and the DRAMP. The laws, regulations and guidelines that BLM must adhere to in prepare these documents are numerous. Notwithstanding these guidelines it is incumbent on the federal agency to prepare a document that is understandable by the general public. The organization of the document is **not "reader friendly."** The redundant and inconsistent presentation of recommendations and proposals renders this document impossible for most of the interested public to understand and provide comments.

The rainfall-triggered camping closure of Dunebuggy Flats (DBF) **lacks sufficient rational** to support this major action. This proposal presumes that BLM is incapable of enforcing the closures. This proposal ignores historical closure compliance and assumes that BLM cannot provide the required enforcement resources.

The need for public safety CH pass-through corridors is **not acknowledged**. The preferred CH boundaries do not consider the topography of the dunes as it relates to public safety. The camping closure on the east side in the microphyll woodland habitat is **not supported by any evidence** that historical camping has damaged the habitat or otherwise affected species that reside in this habitat. Appendix "O" regarding bird populations provides no conclusive evidence in support of a camping closure.

Enclosed with this letter are specific and detailed comments provided in support of the foregoing observations. Also enclosed with this letter is a DVD narrated by ASA attorney David Hubbard which is intended to be considered as additional comments. It is well understood that the ISDRA is a popular and unparalleled venue for OHV recreation. However, given the vastness of the ISDRA's dune system, it is sometimes difficult to place OHV activities in their proper spatial context. To assist in this effort, the American Sand Association (ASA) has prepared a DVD which (1) visually depicts where recreational

activities take place within the ISDRA, and (2) shows the extent to which those activities intersect and affect key biological resources at the dunes, most notably the PMV. The DVD also includes a narrative component that explains the visual images presented and discusses the many technical studies conducted at the ISDRA since 1998. We submit this DVD to provide a visual accompaniment to our comments, and we request that it be include in the administrative record.

Yours Truly,

Bob Mason, President

From: [Christopher C](#)
To: caisdrmp@ca.blm.gov
Subject: ATTN: Erin Dreyfuss RE: Glamis Dunes Closure
Date: 08/04/2010 07:40 PM

Ma'am,

Maybe the corresponding "researchers" should preferably investigate the results of the direct economy and indirect assets contributing to local and overall state revenue when you infringe on OHV activities correlating to "Glamis". The immediate purchase of gasoline (with fuel increasing by the octane incrementally), non-depleting supply of already-expensive permits, perishable goods, and other merchandise would dramatically decrease. Given the status of California's broke and laughable economy, is it really wise to make your decisions regarding the closure of THE MOST POPULAR OHV AREA? I think not.

Chris Chavarria
419 S Pima Ave
West Covina, CA 91790
6268624247

From: [Matt Chapman](#)
To: caisdrmp@ca.blm.gov
Subject: Glamis closures
Date: 08/04/2010 07:12 PM

I am respectfully requesting for no additional closures. I've been a regular visitor for 15 years and it is a passion for my whole family. Additional closures will create hazards due to the large number of vehicles in a reduced area. Thanks Matt Chapman 951-333-3357 7988 La Crossed, Riverside, CA 92508

From: [Nancy Kettle](#)
To: caisdrmp@ca.blm.gov
Subject: DRAMP for Imperial Sand Dunes
Date: 08/04/2010 05:53 PM

Dear Ms. Dryfuss:

Our family would respectfully request that the BLM recognize the well thought out and clearly articulated concerns regarding the potential decisions that will affect those of us whose families love the dunes during the winter months every year.

Unnecessary closure of large areas of ISDRA could very well result in real safety issues for us and our children as a crowded recreation area is far less safe. In today's economic climate, removing existing safe family recreation environments is a sad commentary on what and who matters. To frivolously reduce areas for families to play because poor science suggests that maybe a plant might not survive (when there is clear evidence that PMV thrives where dune buggies travel) leaves many of us questioning the fairness of arbitrary closures. Where is the concern for the public that respectfully enjoys the outdoors at the dunes or the many businesses which depend on our continued use of recreation equipment and travel through communities which service travelers?

Please reconsider the need for such extensive closures at ISDRA and close only that which is **truly** necessary for the environmental concerns to be addressed fairly. Families are important too.

Nancy K. Kettle
9588 Wilson Ave.
Alta Loma, CA 91737
909 987-2871

From: [george.phillips](mailto:george.phillips@caisdrmp@ca.blm.gov)
To: caisdrmp@ca.blm.gov
Subject: ISDRA RAMP
Date: 08/04/2010 05:08 PM

Sir or Mam:

I only recently began visiting the Imperial Sand Dunes Recreational Area (ISDRA). I must admit, since I began using the land and becoming more aware of the techniques used to manage the ISDRA, I have been sorely disappointed. I am quite aware of the need to protect particular plants, and or wildlife. As an avid backpacker, and National Park visitor I've had opportunities to see wild wolves, bears, mountain goats, and even some plants such as the beautiful Sego Lilly of Utah. However, I would never have had this opportunity without the ability to recreate in those lands. I would even say, that it was my ability to experience first hand all those sightings that instilled a personal passion about also preserving for future generations their ability to recreate and enjoy sightings of their own. A careful balance must be struck between preserving the land and wildlife with a management plan that allows visitors to recreate in, experience and enjoy the land.

And this is where my personal disappointment begins. I would fully support a management plan that used sound science to base decisions upon. It has become quite clear to me, the Bureau of Land management (BLM) has consistently chosen biased and often incomplete studies to back closures in the ISDRA. They have reached 'conclusions' from these studies for such things as recovery of the Pierson's Milk Vetch (PMV) without having enough information to even begin outlining what would determine the recovery as an actual success. They have also ignored numerous studies sponsored by and sent by the American Sand Association (ASA) regarding PMV. I won't waste time copying and pasting what's already been said. I fully support the comments already submitted by the ASA including Dr. Art Phillip and Dr. Glenn Haas.

With everything I have stated in mind, I would prefer a hybrid of alternatives 7 & 8. The idea closing of Dune Buggy Flats based on rainfall is unsubstantiated period. Closures need to have distinct boundaries that are easy to follow, and preferably take into account the natural flow of the terrain. It would seem wasteful at best to me to mark and enforce a closure area with so many peninsulas and long skinny fingers reaching away from the main body as in Alternative 8.

Regards,
George H. Phillips

From: [Dave Hardenburger](#)
To: caisdrmp@ca.blm.gov
Subject: DRAMP Comments
Date: 08/04/2010 05:21 PM

Erin Dreyfuss
1661 S. 4th Street
El Centro, CA 92243

Dear Erin,

I'm writing to you regarding the DRAMP proposals to restrict camping and off-road vehicle use in the Imperial Sand Dunes area, specifically Dunebuggy Flats in Gordon's Well. I've been camping in Dunebuggy Flats and other areas of the Imperial Sand Dunes for over 30 years and continue to enjoy the area. Over the years I've seen the "use areas" get smaller and the "closed areas" grow. I fully support environmental protection but I feel that California tends to "protect" certain areas by closing them off without the proper data to actually prove the necessity. Below are some comments that I read from a document written by the ASA:

* The DRAMP proposes to restrict camping in Dunebuggy Flats (DBF) when a certain rainfall threshold is met, presumably to provide additional protection for the PMV. However, neither the camping closure nor the rain threshold which would trigger it are supported by technical studies or related data. A proposed camping restriction of this magnitude must have some scientific basis before it can be considered for adoption and implementation. *

My concern is that the BLM is making a move for a solution without knowing the actual problem. Worse yet, the tax paying citizens are the ones that will be punished by losing access to PUBLIC lands. Erin, I'm sure you've been bombarded by emails and letters stating facts and opinions from both sides of the issue. All I ask, as a citizen and someone who enjoys spending time with my family in the Imperial Sand Dunes, is that these decisions are made on hard facts and the understanding that PUBLIC land should be accessible to the PUBLIC.

As a comparison, I work as a Firefighter and a Paramedic in San Diego County and we are often tasked with doing research studies on the effectiveness of medical treatments in an "Out of Hospital" environment. This data is recorded for several years during thousands of patient encounters and the data is reviewed and studied by experts in the field. No changes are made to the way we do business for the public until the science has shown a definite improvement in patient care. I feel that the BLM is moving forward on a plan without a solid study... and how could they possibly expect a favorable outcome? What if exactly the opposite happened? Science, data, studies, experts all tell us that. I would like to see the BLM use the same consideration before making drastic changes as outlined in the DRAMP proposal.

I apologize in advance for the long read. Thank you for your time.

Sincerely,

Dave Hardenburger
5765 Yorkshire Avenue
La Mesa, CA 91942

From: [gary.simpson](mailto:gary.simpson@ca.blm.gov)
To: caisdrmp@ca.blm.gov
Subject: DRAMP
Date: 08/04/2010 02:28 PM

To whom it may concern, I am alarmed about the latest proposed conditions that will affect my friends and family. I have ridden the Glamis/Imperial Dunes Complex since 1982 (more than half my life). I have experienced many changes over the years, which have mostly decreased ride area (negative), improved law enforcement (positive), improved access (negative), and provided some services (positive). The initial decrease in ride area, north of Highway 78 served an environmental purpose, closing little used dunes and allowing a pristine environment to flourish again. The later closures fractured and confined the area which compressed traffic and riders, increasing vehicle density. This ultimately has the effect of decreasing safety, much like rush hour traffic. Veteran riders like me constantly avoid vegetation and lizards-running over plants is a detriment to rider and vehicle, especially tires.

The Center for Biological Diversity lawsuit(s) are efforts to close the ride area completely, without regard for riding, hobbyists, and the science that has not supported their contentions. For us, the users of this recreational area, compromise has been to accept repeated small closures of the ride area so that larger blocks of public lands are not taken from us. Now it appears that land and access are to be taken away. Green sticker funds are taken from us and not used for their purpose, which is provide and maintain places to ride. User permit fees continue to climb while access and area continues to plummet.

My biggest complaint is this: with all the usage and traffic of the Imperial Sand Dunes, a strong wind blows all the dunes clean of tracks, leaving scant evidence of human activity. And the wind blows about 200 days a year.

Gary Simpson
Science Teacher
Geologist
Registered Voter
3727 E. 54th St.
Maywood, CA 90270

From: [Bryce Rudd](#)
To: caisdrmp@ca.blm.gov
Subject: attention Erin Dreyfuss. Concerns with proposed RAMP Alternatives
Date: 08/04/2010 02:27 PM

Dear Ms. Dreyfuss,

My name is Bryce Rudd and I am writing in concern to the proposed RAMP alternatives. I wanted to express my concern in the closing of more area of the dunes in the IDSRA. My family and I have been going to the ISDRA for more than two generations and I would like there to be a third. To me and my family the ISDRA is more than just a place to go and speed around on our toys and pitch a tent for the weekend. It's a place where memories, friends and traditions are made and cherished. I actually met my wife at the ISDRA. I now live in Arizona and the rest of my immediate family and friends are still living in California. The winter dune season is the only time everyone gets together on a regular basis and it's nice to have a family reunion every month, but if closures or riding area and camping area continue to happen I fear we will lose this family time we have together.

I also have friends that live and work in El Centro that depend on the business during winter riding season. If more land is taken away I fear people will decide that there is not enough room for everyone to ride and or camp and they will get out of the sport causing the already fragile economies of the small towns surrounding the ISDRA to suffer a great deal more.

As a responsible visitor to the ISDRA I would respectfully request that the selected RAMP alternative have a minimal impact in accordance with the concerns as outlined by the American Sand Association (A.S.A.).

Thank you for your time.

Sincerely,
Bryce Rudd
14667 W. Mauna Loa Ln
Surprise, AZ 85379
623-444-4544

From: [Todd Kausrud](#)
To: caisdrmp@ca.blm.gov
Subject: ISDRA RAMP COMMENTS
Date: 08/04/2010 02:15 PM

To whom it may concern,

I would like to voice my objection to several of the proposed limitations included in the new RAMP for the ISDRA.

Any additional restrictions and/or closures are completely unfair in light of the fact that a large percentage of this area is already closed to camping and motorized use – including most everything north of Hwy. 78. There are already many square miles of protected area, to add to this would not be a balanced approach.

Thank you,

Todd Kausrud
2359 Spring Meadow Dr.
Chino Hills, CA 91709

From: [Tony](#)
To: caisdrmp@ca.blm.gov
Subject: DRAMP Protest
Date: 08/04/2010 01:59 PM

Ms. Dreyfuss,

I will not vote for any politician that supports the Draft Recreation Management Plan (DRAMP) legislature.

There are far more important issues that need to be addressed than the revocation recreational rights.

I am an avid recreational ATV rider who enjoys the dunes. I follow all the rules and purchase all the required licensing and permits. I do not litter or vandalize and I always clean up my campsite to its state prior to my arrival.

I feel that this legislation is another form of punishing all people for the actions of a few.

Thank you for your time.

Regards,
Tony Polimene

From: [ANGEL F GARCIA](#)
To: caisdrmp@ca.blm.gov
Subject: attention Erin Dreyfuss
Date: 08/04/2010 08:25 AM

I am writing this email as a concern to the proposed closures set to take in effect at the Imperial Sand Dunes recreation Area. The proposed closure causes a safety concern. I frequent the area proposed to be closed to stay away from the more traveled open areas to avoid the large crowds and to have more open recreational space. In closing the area, that would force more off roaders to off road in a smaller area . When you are off roading, you want to keep a safe distace from other off roaders as possible.

Additionally, I believe that the closure would have a catostrophic impact in the already heavily impacted imperial county economy. More closures would deter people from visiting ISDRA, thus resulting in less money coming into the imperial valley. Westmorland, Brawley, El Centro, and surrounding cities and communities would lose out on much needed sales of gasoline, groceries,fast food, hotel rentals. More closures would send that money to othe parts of the state, other states like nevada and arizona, or oven worst, Mexico

Isdra is an open space where families can go to have a safe off roading area, and to spend their money doing it. Please keep the area open. Help keep it safe and keep the money coming into the Imperial Valley.

Thank you for your time,
Angel F Garcia
5597 Bonnie Brae St
Montclair Ca, 91763
(626)367-1927

From: [wes porter](#)
To: caisdrmp@ca.blm.gov
Subject: attn.Erin Dreyfuss
Date: 08/04/2010 01:37 AM

To whom it may concern:

My name is wes porter, i live at 8019 langdon ave, hesperia, CA 92345. It has been brought to my attention the purposed closures of the imperial sand dunes recreation area, this is an outrage. These lands have been slowly taken away from the people that enjoy and take care of them for the past few decades, it has to come to a stop. You have an entire third of the dunes north west of highway 78 that has been closed of since 1974, this should be more than enough room for the vegetation and wildlife to flourish. I have been going to the imperial sand dunes since i was 6 months old, i love and respect the dunes. If these closures are to deter the influx of "stupid" duners, that is understandable but please crack down on them and leave the entirety of the dunes for the true dune riders out there.

sincerely yours,

wes porter
8019 langdon ave
hesperia, CA 92345
bigroostar@hotmail.com

From: [Sean Griffin](#)
To: caisdrmp@ca.blm.gov
Subject: Draft Recreation Management Plan
Date: 08/04/2010 01:48 PM

I will not vote for any politician that supports the Draft Recreation Management Plan (DRAMP) legislature. There are far more important issues that need to be address than taking away recreational rights.

Take care,
Sean Griffin

From: duane318@aol.com
To: caisdrmp@ca.blm.gov
Subject: Glamis (ISDRA) Management Plan
Date: 08/04/2010 01:25 PM
Attachments: [Letter to BLM - RAMP 8-3-10.doc](#)

Dear Erin,

I have attached a letter with my personal comments regarding my participation in the sport of Off Highway Vehicle use, and specifically on the importance of this activity to me and my family / friends. In lieu of reopening / returning to the available riding areas in Glamis prior to the central area closures, I would be in favor of a hybrid of alternatives 7 & 8 in the RAMP.

I am adamantly against any further closures and restrictions on the riding areas within the ISDRA and Glamis specifically. Please take the time to read my letter. I am sure that you are receiving many responses and know that this is an important and time consuming issue for you. I have every confidence that you will give my point of view a frank and thorough consideration. Please feel free to contact me at any time if needed.

Regards,

Duane L. Terry
30 Calle Bella
Rancho Santa Margarita, CA 92688
949-858-5265
email: duane318@aol.com

From: lorigaryj@aol.com
To: caisdrmp@ca.blm.gov
Subject: OHV Closures
Date: 08/04/2010 01:09 PM

We wish to inform you that we support ASA's position as stated in their comments dated August 4, 2010.

Sincerely,

Gary & Lorrie Johnston
3635 N Mearns Place
Chino Valley, AZ 96323

From: [Jim Ober](#)
To: caisdrmp@ca.blm.gov
Subject: Imperial Sand Dunes
Date: 08/04/2010 01:00 PM

I think any reduction of usage of the Imperial Sand Dunes is unwarranted and unwanted. We need recreational areas, and the Federal government and the environ whackos have grabbed enough. time for us land USERS to fight back!
Jim Ober

August 4, 2010

RECEIVED
BUREAU OF LAND MANAGEMENT
2010 AUG -6 AM 11:43
EL CENTRO FIELD OFFICE
EL CENTRO, CA

RAMP Team Leader
Bureau of Land Management
1661 S Fourth Street
El Centro, CA 92243

Subject: Imperial Sand Dunes Recreation Area (ISDRA)

Dear RAMP Team Leader

The ISDRA is a popular and unparalleled venue for OHV recreation for my family and friends. We have enjoyed the area since the 1970's. Please keep it as open as possible for all of us to continue to enjoy. If the dunes are closed how will anyone be able to enjoy it? Have you ever hiked in the sand? My grandparents were able to ride in our sand buggies and enjoy the sand in their 70's. PLEASE keep it open for my future grandchildren to enjoy.

The dunes are becoming increasingly more dangerous to travel in because of the increasing popularity and concentration of people in a smaller and smaller area.

Sincerely,



Richard & Christine Vetter



1582 N. Broadway

Escondido, CA 92026

From: [bruce miller](#)
To: caisdrmp@ca.blm.gov
Subject: closures
Date: 08/04/2010 12:14 PM

We side with ASA on this issue of closure and restrictions. We see no proof or good reason to do this.

there seems to be faulty studies going on,
PLEASE leave things as they are, or make them better NOT worse.

bruce c miller
asa member
avid duner

From: [Shannon Moore](#)
Reply To: shanmoore9@gmail.com
To: caisdrmp@ca.blm.gov
Subject: Protect the Algodones Dunes
Date: 08/03/2010 03:00 PM

C'mon guys, I voted for Obama because I thought his administration would do more to protect the amazing wilderness in this country. I've spent a lot of time in the Southwestern deserts, and there is NOWHERE else like it in the world. Please don't let any more of this region fall prey to ORV use.

Shannon Moore
33 Crescent Dr.
Orinda, CA 94563
US

From: [Louis Delrio](#)
To: caisdrmp@ca.blm.gov
Subject: ATTN: Erin Dreyfuss
Date: 08/03/2010 05:33 PM

Hello Erin,

Catching wind of more possible land closures in ISDRA, I have to write you this letter. My better portion of my life has been spent at Imperial Sand Dunes since my parents would camp there when I was just 2 months old, they have been going since they were teenagers. I have seen environmental laws and regulations used as a weapon by those wishing to have public land cordoned off keeping people such as myself and family from enjoying the sport I hold so dear.

In attempting to work within the system I helped fund environmental studies through membership fees and donations to associations who represent responsible off road enthusiasts. These studies clearly show the success of the Pierson's Milk Vetch is tied to rainfall with little to no effect from off road vehicles. Based on these studies I thought we'd be able to go back to the old agreement keeping everything North of Highway 78 except Mammoth Wash off limits while abolishing the central closures. This apparently is not to be. I have come to realize the goal of the Center for Biological Diversity is not the wellbeing of the indigenous plants and animals, the goal is ending the sport of off road riding. So be it. I now find myself writing this e mail to you and quite frankly don't know where to go with it. On one hand I want to convey my disgust with the whole system with a tantrum regarding how I now intend to be one of the 3% of riders with zero regard for rules who are used as poster children for why Glamis should be closed. The other side of me wants to beg you to stand up to environmental extortion.

I guess this is the best I can do as I'm just tired of fighting for access to PUBLIC land. Part of me wants to say hell with California and its constant pressure to close all of my OHV lands and just go to neighboring states but the memories I have of Imperial Sand Dunes keeps me fighting and hoping for a better resolution. However this thing works out I'll be riding in the dunes, either I'll be a responsible family man who leaves his campsite better than he found it or as an outlaw chased down because he violated some ridiculous central closure that was put in place for exactly that purpose so I can be held up as an example of not following the rules.

I don't envy your assigned task and I understand the power of the people on the opposite side of the issue, all that can be expected from you is impartiality, unfortunately money funding lawsuit after lawsuit makes expedience a lot more attractive. I do wish we can keep our land so my daughter's future family may still continue this tradition in our family that has been since the early 1970's.

Best regards,

Louis Delrio

(760)443-9322

12839 Running Deer Rd

Apple Valley, CA 92308

From: LJowdy@aol.com
To: caisdrmp@ca.blm.gov
Subject: Ramp Comments
Date: 08/03/2010 09:37 AM
Attachments: [PMVvsRain_andTiming.pdf](#)

Dear Erin,

Rather than write up the same information that has already been submitted, I will go on record that I concur with the American Sand Association's comments and, I'll include the following information:

We always have known that rain is what makes the PMV grow or not grow, but no correlation has ever been done. To that end, here it is.

The rainfall data was taken from the Cauhilla ranger station and the Buttercup automated weather station (AWS) web pages. Each plot is the rainfall for the month as indicated added to the previous month - so it accumulates. The chart shows only rainfall from September through April as rains in other months probably don't do much good for the PMV and would clutter the graph. PMV numbers were taken from the BLM survey reports and are divided by 250,000 to keep the graph scale within reasonable limits.

The chart covers the following growing seasons:

2003 Survey for the 02-03 Growing Season: Not much rain so low PMV numbers

2004 Survey for the 03-04 Growing Season: What little rain there was came too late

2005 Survey for the 04-05 Growing Season: Rains started in August and were consistent through the season resulting in explosive germination and seed production. As perfect a rain curve as we're likely to see.

2006 Survey for the 05-06 Growing Season: A big storm in August, then little after that resulting in the worst year

2007 Survey for the 06-07 Growing Season: Fair amount of rain at beginning of season, not much after that - fewer numbers than if rain had continued.

Even though not scientific (but the data used is), the rain data we have is from only two stations, and rains can occur in one area and not another, it still paints a vivid picture - bottom line: the amount and timing of rain makes the plants grow (or not).

Given that several of the BLM and other studies indicate that less than 1% of the PMV are impacted by OHV activities, it is easy to see that rainfall, more than

anything else, is responsible for PMV numbers or the lack of them.

Attached is a PDF file with the graph so please download, print and include with my comments

Sincerely,

Lawrence Jowdy, Vice Chairman Desert Sub Group (formerly ISDRA TRT)
2018 S. Palmetto Ave.
Ontario, CA 91762
(909) 391-3465

From: sanduners@aol.com
To: caisdrmp@ca.blm.gov
Subject: ISDRA Comments
Date: 08/03/2010 11:44 AM
Attachments: [DRAMPcomments2010.pdf](#)

Hi, attached our comments from the R&R Duners Club. Please reply back that you received our comments.

Thanks,

***Jim Colln
Vice President
R&R Duners Club.***

From: [Brendan Hughes](#)
To: caisdrmp@ca.blm.gov
Subject: Comments on Imperial Sand Dunes Draft Recreation Area Management Plan
Date: 07/31/2010 01:51 PM

To whom it may concern:

My name is Brendan Hughes and I would like to urge BLM to adopt Alternative 3 for the Imperial Sand Dunes Draft Recreation Area Management Plan. This alternative allows for the highest level of protection for threatened, endangered, and special-status species and rare habitat types.

Alternative 3 of the RAMP provides the most protection for the important biological resources of the Imperial Sand Dunes Management Area. Species such as the Peirson's milk-vetch, the flat-tailed horn lizard, and the Mojave desert tortoise are in the area. These species, especially the latter two, are facing increasing threats from renewable energy development and OHV use on public lands. These species need to be protected to the greatest extent possible in order to preserve as many refuges for their survival. Additionally, the Peirson's milk-vetch needs to be protected from the rampant and out-of-control OHV use that occurs at the Imperial Dunes. Off-roaders cannot be trusted to wisely use lands to which they have been given access. I learned this from doing restoration work for BLM in the California Desert for four years of my life. Wilderness area boundaries are routinely violated and limited-use areas show extensive travel off of the designated route system. Any access given to off-roaders in the vicinity of the Peirson's milk-vetch will lead to damage to individual plants and perhaps the extinction of the species. BLM should close FWS designated critical habitat to OHV use and allow for the recovery and expansion of the species.

Additionally, BLM should protect the rare and special microphyll woodland habitat in the eastern portion of the management area. In addition to being visually pleasing, these areas are important havens for wildlife.

Alternative 3 is very satisfactory in its Visual Resource Management classifications, its prohibitions on mineral and geothermal leasing, its recreation management zones, and its areas that are closed to OHV use. In addition to protecting resources, these provisions allow for more quiet recreation in the Imperial Dunes, including hiking and sightseeing in a stunning setting. The reality of OHV use is that it makes any other recreational uses of the area unpleasant and dangerous, essentially closing the area off to other users. Alternative 3 helps BLM achieve one of its goals of providing for diverse recreation opportunities.

Two areas where Alternative 3 is lacking regard Solar and Wind development. This alternative leaves some areas available for potential Solar and Wind development. This is an erroneous decision. The recreational, cultural, biological, and scenic resources of the Imperial Dunes are too important and too widespread in this area to allow room for renewable energy development. Therefore all lands within the planning area should be made unavailable for Solar and Wind development.

This area deserves as much protection as possible due to its rich resources. Alternative 3 provides for this protection, more or less, and should be chosen as the Preferred Alternative in the Final EIS and RAMP.

Thank you for your consideration.

Brendan Hughes
61093 Prescott Trail
Joshua Tree, CA 92252

From: [Dave & Sherry Wehlage](#)
To: caisdrmp@ca.blm.gov
Subject: Comments on the DRAMP proposal
Date: 07/29/2010 02:10 PM

Erin, you may not remember me; Christina Gonzales and I interviewed you and Neil Hamada in Glamis around Easter 2006 for Fox-11 News in Los Angeles. I'm sure you have had your hands full with public comment since the DRAMP was released; however, I'd like you to take just a few moments to read yet another one.

I'm not going to go over the various points that have been made about the nature, scope, and reliability of the scientific studies, or attempt to reinforce (or refute) any of the contentions about OHV activity and its participants, good or bad. Suffice to say that I grew up exploring the desert Southwest in offroad vehicles, and now my family and I continue that tradition with other families all over southern California.

My issue with this process is one that came into much sharper relief during the taping of those segments in 2006. Namely, that the issue of motorized offroad recreation in the ISDRA is not really about protecting the PMV, or desert tortoise, or scarab beetle. It's about whether or not a small but vocal minority can invoke a specious "greater good" argument to effectively outlaw an entire class of vehicle, and by extension deny the public the right to recreate responsibly on public lands. Legal challenges under the ESA are only a means to that end, and will not (I repeat, NOT) end with the adoption of any version of the proposed RAMP, even the most restrictive alternative. Organizations like the CBD and PEER have dedicated themselves to the elimination of OHV use, period... and will continue to use whatever avenues are available to that end; the phrase "by any means necessary" comes to mind. This ten-year battle over the PMV is only one salvo in that war.

The RAMP staff have attempted to balance the ESA requirements with the public's right of access, and based upon the indicated preferred alternative RAMP have done so admirably. I would of course prefer that no restrictions were placed upon motorized recreation or camping within the ISDRA, but I recognize that compromises must be made. I wish only that our opponents were as accommodating.

Bottom line: We in the OHV community are not monsters. We are families who only want to continue to enjoy our little slices of desert in the manner we prefer. There are literally tens of millions of acres of desert habitat closed to us, while only a few hundred thousand remain open for our use. Please don't take away any more of what little we have left.

Regards,

Dave Wehlage
1318 Hartley Ave
Simi Valley, CA 93065
805/558-8026
noozeyeguy@earthlink.net
dave.wehlage@FoxTV.com

Ps: Links to YouTube videos of the three segments we produced during that trip can be found [here](#), [here](#), and [here](#). Your cameo is at 1:31 on segment three... enjoy!

California Native Plant Society

San Diego Chapter of the California Native Plant Society

P O Box 121390

San Diego CA 92112-1390

info@cnpssd.org | www.cnpssd.org

July 28, 2010

BLM EI Centro Field Office

1661 S. 4th Street,

EI Centro, CA 92243

caisdrmp@ca.blm.gov

RE: Imperial Sand Dunes Draft Recreation Area Management Plan and DEIS

Dear Sir or Madam,

We appreciate the opportunity comment on the Imperial Sand Dunes Draft Recreation Area Management Plan and Draft Environmental Impact Statement. The California Native Plant Society (CNPS) works to protect California's native plant heritage and preserve it for future generations. CNPS promotes sound plant science as the backbone of effective natural areas protection. We work closely with decision-makers, scientists, and local planners to advocate for well informed and environmentally friendly policies, regulations, and land management practices.

CNPS supports a realistic balance of conservation and recreation in the Imperial Sand Dunes, so that all sensitive species are protected, not just the federally endangered Peirson's milk vetch (*Astragalus magdalenae* var. *peirsonii*). Under this criteria, we found substantial flaws with all alternatives. Alternative #3 is the least objectionable alternative, but only because it offers adequate protection to Peirson's milk vetch, but it is inadequate for protecting most other species, particularly those that use the microphyll woodland on the east side of the area.

Only Alternatives 3 and 8 can be legitimately considered, because only these allow for protection of the Federally Endangered Peirson's milk vetch (*Astragalus magdalenae* var. *peirsonii*). All other options promote take of Peirson's milk vetch and as such, they are not legitimate alternatives.

A We identified substantial flaws with the preferred alternative (Alternative 8). It allows off-highway vehicle (OHV) traffic on all of the planning area except for the critical habitat area designated for the Peirson's milk vetch in 2008 by the U.S. Fish and Wildlife Service. This current area is substantially smaller than the known range of Peirson's milk vetch, as shown in the previous habitat designations, so this proposed boundary will result in the take of Peirson's milk vetch. This conflicts with BLM's need to protect



Dedicated to the preservation of California native flora

endangered species under the U.S. Endangered Species Act.

Moreover, the boundary for the critical habitat is so complex that a conscientious OHV driver could wander into it by accident. The “no-go” boundaries need to be readily seen and easily avoided, and the complex area outlined in Alternative 8 is neither.

Alternative 8 provides no protection to plants and plant communities outside of the north Algodones Dune Wilderness Area and the critical habitat mentioned above. This includes a majority of the microphyll woodland and creosote bush scrub, both of which are habitat to over 60 plant species. There is no evidence that the level of OHV traffic supported by these documents is compatible with the continued existence of rare species on these dunes.

We support the realistic consideration of low-impact low-cost visitation to the dunes in order to achieve a combination of balanced and diverse resource uses as required by the Federal Land Policy and Management Act. Of the alternatives presented, Alternative 3 is the least objectionable. It has simple outlines that are easier to enforce and avoid; therefore it has a realistic chance of being enforceable and protecting the fragile plants and vegetation of the Algodones Dunes complex. It also provides for some protection of all vegetation types within the Algodones Dunes.

Thank you for consideration of our comments.

Sincerely,

Carrie Schneider, Conservation Chair CNPS-San Diego

Cc:

July 27, 2010

DRAMP Team Leader

Bureau of Land Management

1661 S. 4th St.

El Centro, CA 92243

RECEIVED
BUREAU OF LAND MANAGEMENT
2010 AUG -4 AM 11:30
EL CENTRO FIELD OFFICE
EL CENTRO, CA

Subject: My comments on the proposed on the 2010 Draft Recreation Management Plan and Draft Environmental Impact Statement for the Imperial Sand Dunes Recreational Area.

These comments are based upon my personal visits to the Imperial Sand Dunes Recreation Area (ISDRA) over a period of approximately 5 years mainly to the Glamis and Gordon's Well area; as well as reviewing of the above documents and input from the American Sand Association.

The best of the 8 alternatives after study in my opinion are options 1 (the best) followed by alternatives 7&8 as secondary options.

By my observation:

The Pierson's Milk Vetch is growing just as (if not) more heartily and plentiful in the areas where it is not protected as in those where it is.

Also, there does not seem to be a lot of solid evidence that PMV grows more in times where there is excess rain. Thus, the closing of the Dune Buggy Flats Campground during times of more plentiful rain is not scientifically justifye

The closing of the east side of the microphyll woodland habitat to camping is not fully justified either. This was based on a poorly done survey with inaccurate and unproven information. There is no evidence that camping in this area has damaged the habitat or adversely affected the species that reside there.

Closed areas need to have designated corridors thru them for emergency purposes.

Has the economic impact to the area been considered when reviewing these alternatives? Businesses such as the Glamis Beach Store, Mama Jeaninne's restaurant and Glamis storage as well as the seasonal vendors depend on the OHV community for their livelihood.

In one of the documents I reviewed there was mention of wanting to hike or horseback in the ISDRA and have it be a "peaceful and serene experience". In the five years, our family has gone to the ISDRA we have never seen a single horseback rider and the only "hikers" we have seen have been illegal immigrants.

If the above is true, there are plenty of designated wilderness areas that are closed to OHV use, for these persons to have their "peaceful and serene experience". The ISDRA is one of the few places that OHV users have to really call their own.

I wish to thank the BLM for making these documents available to us for review and allowing us to express our opinions and beliefs. Also, thanks to you and the various law enforcement agencies for helping keep the ISDRA a safe place to go.

I hope that you will consider my letter and those of my fellow "duners" and that the ISDRA will remain a place for families like mine and my friends to get together and create great memories.

Sincerely,

A handwritten signature in cursive script that reads "Adrienne S. Schiele".

Adrienne S. Schiele

4809 W. Gail Dr.

Chandler, AZ 85226

From: [Valerie Kastoll](#)
To: [Neil Hamada](#)
Subject: Fw: elcentro feedback - dramp comment
Date: 07/22/2010 03:12 PM

----- Forwarded by Valerie Kastoll/CASO/CA/BLM/DOI on 07/22/2010 03:11 PM -----

dthompson@chapmantucson.com

To vkastoll@ca.blm.gov, mwest@ca.blm.gov
cc

07/22/2010 02:43 PM

Please respond to
dthompson@chapmantucson.com

Subject elcentro feedback

name = Daniel Thompson

organization = American Sand Association

email = dthompson@chapmantucson.com

subject = DRAMP

FeedbackType = Comment

request_comment = I was writing you today to say for the record; I have read the American Sand Association (ASA)Comments sent to your office, and in order not to sound redundant. I stand with the Association and there comments sent to you on or around the seventeenth of July 2010 as my own.

Thank you Daniel Lee Thompson

Marana Arizona

username123 =

sentinal = Sentinal

page_referred_from =

<http://www.blm.gov/ca/st/en/fo/elcentro/recreation/ohvs/isdra/dunesinfo/docs/isdramp.html>

fo = 8

Submit = Send Request

Los Angeles Cty_Sanitation Dist cover.txt

"Dodge, Theresa"
<TDodge@lacsds.org>
>
08/06/2010 11:46
AM
"Erin Dreyfuss (E-mail)"
<erin_dreyfuss@ca.blm.gov>
To
"Dodge, Theresa" <TDodge@lacsds.org>
CC
Subject
Comment_on_BLM_ISDRA_Draft_Recreation_Area_Management_Plan2010

Good morning Erin,

Attached is our comment letter on the DRAMP. Thank you again for being so helpful when I had questions. We're also sending a hard copy to the El Centro office but assume this e-mail is the official submittal. Please let me know if you have any problems receiving or opening the file.

Enjoy your weekend (don't take any reading home),

Theresa

Theresa Dodge

Mesquite Regional Landfill
Facilities Planning
Sanitation Districts of Los Angeles County
(562) 908 4288 ext 2599

<<DMS-#1636537-v2-Comment_on_BLM_ISDRA_Draft_Recreation_Area_Management_Plan_2010.PDF>>

(See attached file:
DMS-#1636537-v2-Comment_on_BLM_ISDRA_Draft_Recreation_Area_Management_Plan_2010.PDF)



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

STEPHEN R. MAGUIN
Chief Engineer and General Manager

August 6, 2010

Erin Dreyfuss, RAMP Team Leader
Environmental Protection Specialist
BLM California State Office
2800 Cottage Way,
Sacramento, California 95825.

Draft Recreational Area Management / Environmental Impact Statement for the ISDRA

Dear Ms. Dreyfuss,

County Sanitation District No. 2 of Los Angeles County owns and will be operating the Mesquite Regional Landfill (MRL) in Imperial County, which is approximately five miles northeast of the Glamis area of the Imperial Sand Dunes Recreation Area (ISDRA). We appreciate the opportunity to review and comment on the April 2010 Draft Recreational Area Management /Environmental Impact Statement (RAMP/EIS) for the ISDRA.

We have limited our comments to the text discussing the MRL, clarification of the NEPA process, and suggestions on increased weed control and waste recycling measures. As we understand it, the Draft RAMP/EIS has defined environmental consequences in Section 4.0 as direct effects¹, indirect effects² and cumulative effects³. Consistent with that understanding, we appreciate your consideration of the following comments:

3.0 Affected Environment

3.4 Water Resources

In Section 3.4.2 add more information and detail about the local groundwater basins.

¹ Direct effects are caused by the action and occur at the same time and place as the action.

² Indirect effects are caused by the action and occur later in time or further in distance, but are still reasonably foreseeable.

³ Cumulative impacts result from the incremental impacts of an action when added to other past, present, and reasonably foreseeable future actions (regardless of which agency or person undertakes such actions). Cumulative impacts could result from individually insignificant but collectively significant actions taking place over a period of time

3.7.1.2 Mojave Desert Tortoise (*Gopherus agassizii*)

In **Section 3.7.1.2.3 Distribution and Occurrence within the Planning Area** add 'more than ten years of drought' to the list of causes of desert tortoise habitat being degraded and fragmented.

Under **Section 3.7.1.2.4 Threats**, in the beginning of the second paragraph, first sentence, delete 'was' and replace it with 'is'. Raven monitoring will continue during the operations phase of the project.

Later in the same paragraph delete the sentence: "This trend will likely change as the Mesquite Regional Landfill becomes operational and landfill waste will provide a dependable year-round food source, increasing the likelihood that ravens will become more common residents in the area" because it presumes non compliance with the requirements of the USFWS Biological Opinion terms and conditions for the site.

3.16 Lands and Realty

In **Section 3.16.3.2 Rights-of-Way** include the sentence describing SR-78 as a two lane highway crossing east-west through the northern portion and covering approximately seven miles of the Planning Area and place it after the sentence "Interstate 8 is the major east-west highway and traverses the Planning Area from the southeast and proceeds to the west for about 10.3 miles through the southern portion of the Planning Area." and before "The UPRR runs 40.7 miles along the western portion of the Planning Area."

3.17.1.1 Current and Past Uses of Adjoining Property

In **Section 3.17.1.2.1 Landfill** in the last sentence of the paragraph delete 'near the UPRR'. And add the sentence "The landfill project includes construction and operation of a five mile rail spur which starts at the UPRR north of Glamis and connects through a portion of the Planning Area to the landfill site."

4.0 Environmental Consequences

4.2 Impacts on Air and Atmospheric Values

Under **Section 4.2.6 Unavoidable Adverse Impacts** delete the phrase "emissions from heavy truck traffic accessing the Mesquite Regional Landfill". A portion of the MRL project access is within the Planning Area and administered by BLM. However, MRL is not a part of the proposed action and so not part of any direct or indirect impacts. If a reference is needed to past BLM actions regarding MRL, a citation to BLM No. CA-060-02-5440-10-B026 could be included.

4.4 Impacts on Water Resources

In **Section 4.4 Impacts on Water Resources**, add 'and operation' after each reference to impacts of construction for water resources for geothermal, solar and wind development.

In **Section 4.4.3 Cumulative Impacts** expand discussion of the impacts to groundwater resources local to the Planning Area; for example, the Amos-Ogilby hydrologic unit near the Glamis area.

4.11 Impacts on Visual Resources

In **Section 4.11.3 Unavoidable Adverse Impacts** delete the sentence: "Operational activities of the Mesquite Regional Landfill have the potential to significantly increase truck traffic volumes within the Planning Area, thereby adversely affecting the scenic quality, and

would be considered an unavoidable adverse impact.” The MRL project is not part of the proposed action being analyzed.

In **Section 4.11.4 Cumulative Impacts** delete the sentence: “Operational activities of the Mesquite Regional Landfill have the potential to significantly increase truck traffic volumes within the Planning Area, thereby adversely affecting the scenic quality, and would be considered a cumulative impact.” Use of the word ‘significantly’ is inappropriate for the proposed BLM action because it refers to an approved action (BLM 1996).

As described in the DRAMP, due to extensive use both the SR78 and Interstate 8 travel corridors have a low (C) baseline visual scenic quality with a medium visual sensitivity (units SQRU6 and 7 respectively). Either delete the description of only one user source, MRL, or expand the list of those who use these corridors.

4.14 Impacts on Recreation Program

In **Section 4.14.2 Unavoidable Adverse Impacts** delete the second sentence because the operational activities of the MRL are not part of the proposed action.

In **Section 4.14.3 Cumulative Impacts** delete the first sentence and replace it with one that correctly summarizes the analyzed impacts of the MRL on truck traffic volumes as determined in the ROD BLM No. CA-060-02-5440-10-B026.

4.17 Impacts on Public Health and Safety

In **Section 4.17.2 Unavoidable Adverse Impacts**, delete the sentence: “Operational activities associated with the Mesquite Regional Landfill have the potential to significantly increase traffic volumes within the Planning Area, which would be considered an unavoidable adverse impact to public health and safety.” Use of the term ‘significantly’ in this DRAMP implies the MRL project is part of the proposed action which it is not (BLM 1996).

4.18 Social and Economic Impacts

In **Section 4.18.6 Cumulative Impacts** delete the first sentence in that it does not address economic impacts, nor does it reference or include any data or analysis to support its conclusion.

Any trucks transporting municipal solid waste to MRL would originate from materials recovery facilities/transfer stations. The types of vehicles used would consist of tractors either with covered transfer trailers or chassis hauling intermodal containers. The intermodal containers utilized would have identical characteristics to those employed in rail haul operations. As a result, these trucks would be indistinguishable from other trucks currently hauling commodities through the ISDRA planning area.

Appendices

C: Best Management Practices, Wind Energy, A.2.10 Hazardous Materials and Waste Management page C-16. Clarify that the second bullet item addresses management of non-hazardous waste and add to the second paragraph, second line, the text ‘reuse/recycle opportunities and’ after ‘waste-specific’ and before ‘management’.

P: Reasonable Foreseeable Development Scenarios

For each of the Reasonable Foreseeable Development (RFD) Scenarios involving grading add the requirement that site operators develop a plan for control of noxious weeds and invasive species immediately following the initial surface disturbance for as many rainy seasons as needed. A good example is provided in Appendix C under Wind Energy A.2.7. The RFD in

which grading is anticipated include geothermal energy, solar energy, wind energy, camping pad construction, vault toilet construction, road construction, south dunes infrastructure and concessions.

For each of the RFD Scenarios which generate non hazardous waste during construction or operation, add the requirement that options for segregation and reuse or recycling of material will be assessed and implemented whenever cost effective.

References Cited

Under US Department of Interior, Bureau of Land Management (BLM)

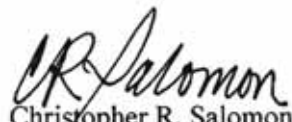
Add:

1996 Mesquite Regional Landfill Record of Decision, SCH No. 92051024 BLM No. CA-060-02-5440-10-B026 California Desert District, Imperial County, California. March 1996

If you have any questions on these comments, do not hesitate to contact Theresa Dodge of our staff at (562) 908-4288, extension 2599.

Very truly yours,

Stephen R. Maguin


Christopher R. Salomon
Supervising Engineer
Planning Section

CRS:TDD:mh

cc: Carrie Simmons,
Bureau of Land Management

ASA.txt

From: Erin_Dreyfuss@blm.gov
Sent: Thursday, August 05, 2010 9:32 AM
To: Susy Morales; Sharon Wright-Harris
Cc: Thomas_Zale@blm.gov; Neil_Hamada@blm.gov; Margaret_Goodro@blm.gov
Subject: FW: American Sand Association ISDRA DRAMP and DEIS comments

Attachments: letter re Final asa DRAMP comments.docx;
Final_ASA_DRAMPComments_8-4-2010.docx

Hi Susy and Sharon -

Attached below are ASA's comments on the ISDRA RAMP Draft.

Have a great day!

Erin Dreyfuss
Environmental Protection Specialist
Bureau of Land Management
California State Office
2800 Cottage Way, Suite W-1834
Sacramento, CA 95825
Office: (916) 978-4642
Fax: (916) 978-4657

----- Forwarded by Erin Dreyfuss/CASO/CA/BLM/DOI on 08/05/2010 09:30 AM

"Robert Mason"
<rwmskm@cox.net>

08/05/2010 07:56
AM

To
"'Robert Mason'" <rwmskm@cox.net>
cc

Subject
FW: American Sand Association ISDRA
DRAMP and DEIS comments

RAMP Team Leader

The ASA has submitted the attached transmittal letter and comments by US mail to the BLM attention Erin Dreyfuss at 1661 S. 4th Street, El Centro, CA 92243.

Also enclosed with this letter is a DVD which is intended to be considered as additional comments. It is well understood that the ISDRA is a popular and unparalleled venue for OHV recreation. However, given the vastness of the ISDRA's dune system, it is sometimes difficult to place OHV activities in their proper spatial context. To assist in this effort, the American Sand Association (ASA) has prepared a DVD which (1) visually depicts where recreational activities take

ASA.txt

place within the ISDRA, and (2) shows the extent to which those activities intersect and affect key biological resources at the dunes, most notably the PMV. The DVD also includes a narrative component that explains the visual images presented and discusses the many technical studies conducted at the ISDRA since 1998. We submit this DVD to provide a visual accompaniment to our comments, and we request that it be include in the administrative record.

Click on the following link to view the DVD. The DVD is large, so it may take few moments to download depending on your internet speed.

<http://www.americansandassociation.org/pages.php?pageid=55>

Bob Mason, President

(See attached file: letter re Final asa DRAMP comments.docx)(See attached file: Final_ASA_DRAMPComments_8-4-2010.docx)



P.O. Box 1872
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President

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Vincent Brunasso

Grant George

Executive Director

Nicole Nicholas Gilles

August 4, 2010

RAMP Team Leader
Bureau of Land Management
1661 S Fourth Street
El Centro, CA 92243

Subject:

Comments on the March 2010 Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Recreation Area (ISDRA)

Dear RAMP Team Leader

Of the alternatives discussed in the DEIS, the American Sand Association (ASA) prefers Alternative 1. However, the ASA believes that some of the other alternatives, notably Alternatives 7 and 8 each have attractive features which could be combined into a potentially effective hybrid. Realigning the irregular boundaries of the Alternative 8 proposed *Astragalus magdalenae* var. *peirsonii* (PMV) critical habitat (CH) closures, increased signage and law enforcement during exceptional rainfall years along with clearly marked pass-through routes would provide a more manageable alternative.

The ASA respectfully requests that Bureau of Land Management (BLM) consider and assess such an alternative in the Final EIS. The ASA's support of a hybrid alternative will depend on the features that alternative would contain and the impacts it would create. The proposed consideration of "hybrid" alternative is provided in response to the last sentence on the first page of DRAMP "Abstract" which states ***"The proposed decisions under this alternative (# 8) could be identical to those under one of the other alternatives presented or could be a combination of the features from several of the alternatives."***

The DRAMP has serious deficiencies. Specifically numerous proposed actions and recommendations are not supported by data germane to the proposal. The DRAMP is fraught with **superficial** and **incomplete** data particularly in the coverage of the biology and ecology of the PMV. The BLM has chosen to ignore a large body of published information and data regarding the distribution and ecology of the PMV. This omission renders many of the DRAMP recommendations invalid.



August 4, 2010

Volume II of the DRAMP and the DEIS includes several maps that among other things define the "OHV Management Areas" for the proposed alternatives. These maps do not provide sufficient detail to allow the public to comment on the proposed alternatives. BLM publishes the latitude and longitude coordinates for the camp grounds and places of interest at the ISD. Without similar coordinates for the boundaries of the proposed closures the public cannot evaluate the impact on OHV activity and make meaningful comments.

The BLM has a formidable task in preparing the DEIS and the DRAMP. The laws, regulations and guidelines that BLM must adhere to in prepare these documents are numerous. Notwithstanding these guidelines it is incumbent on the federal agency to prepare a document that is understandable by the general public. The organization of the document is **not "reader friendly."** The redundant and inconsistent presentation of recommendations and proposals renders this document impossible for most of the interested public to understand and provide comments.

The rainfall-triggered camping closure of Dunebuggy Flats (DBF) **lacks sufficient rational** to support this major action. This proposal presumes that BLM is incapable of enforcing the closures. This proposal ignores historical closure compliance and assumes that BLM cannot provide the required enforcement resources.

The need for public safety CH pass-through corridors is **not acknowledged.** The preferred CH boundaries do not consider the topography of the dunes as it relates to public safety.

The camping closure on the east side in the microphyll woodland habitat is **not supported by any evidence** that historical camping has damaged the habitat or otherwise affected species that reside in this habitat. Appendix "O" regarding bird populations provides no conclusive evidence in support of a camping closure.

Enclosed with this letter are specific and detailed comments provided in support of the foregoing observations. Also enclosed with this letter is a DVD narrated by ASA attorney David Hubbard which is intended to be considered as additional comments. It is well understood that the ISDRA is a popular and unparalleled venue for OHV recreation. However, given the vastness of the ISDRA's dune system, it is sometimes difficult to place OHV activities in their proper spatial context. To assist in this effort, the American Sand Association (ASA) has prepared a DVD which (1) visually depicts where recreational activities take place within the ISDRA, and (2) shows the extent to which those activities intersect and affect key biological resources at the dunes, most notably the PMV. The DVD also includes a narrative component that explains the visual images presented and discusses the many technical studies conducted at the ISDRA since 1998. We submit this DVD to provide a visual accompaniment to our comments, and we request that it be include in the administrative record.

Yours Truly,

Bob Mason, President

August 4, 2010

ASA DRAMP Comments

General Comments

- This draft document does not include all the available documentation on the status of the *Astragalus magdalenae* var. *peirsonii* (PMV). All the available scientific documents about the PMV should be included in this Draft Recreation Management Plan (DRAMP), as the primary restrictions on recreation proposed in this document is based on the presence of the PMV in the recreation area. Therefore ALL pertinent information that has been published on the PMV must be included to allow the public to make an informed decision on the validity of the claims and on Bureau of Land Management's (BLM) proposed restrictions on recreation.
- The DRAMP proposes to restrict camping in Dunebuggy Flats (DBF) when a certain rainfall threshold is met, presumably to provide additional protection for the PMV. However, neither the camping closure nor the rain threshold which would trigger it are supported by technical studies or related data. A proposed camping restriction of this magnitude must have some scientific basis before it can be considered for adoption and implementation. For example, BLM must demonstrate why it believes the proposed rainfall threshold is correlated to increased PMV production. Likewise, BLM must demonstrate why it believes the proposed camping restriction is needed during these rain events to ensure PMV reproductive success. So far, no such demonstration has been made. As a result, the proposed camping closure in DBF should be removed from consideration.
- The DRAMP proposes to eliminate camping on the east side of the ISDRA from Wash 25 to Wash 69. According to the RAMP, this closure is necessary to protect the microphyll woodland habitat that exists in this area. While we recognize the value in protecting this important habitat type, the proposed camping closure is too large and not

supported by technical evidence. Specifically, there is no data showing that camping in the microphyll woodland has damaged the habitat or otherwise affected the species that use or reside in the habitat. The only evidence provided in support of the proposed closure is the PRBO Bird Study, attached as Appendix O to the RAMP. This study did not address camping impact; instead, it focused exclusively on OHV-related impacts. In addition, the Bird Study, by its own admission, is fraught with methodological defects. (See discussion of Appendix O, below.) Moreover, the study's authors acknowledge that, although the microphyll woodland in the open area is not as dense as that in Wilderness Area, it nevertheless supports a great many birds species and is considered high value habitat, even with continued recreational use. The study also determined that the microphyll woodland in the Wilderness Area contained an unusually high number of birds, a finding which, according to the study's authors, may have been caused by surveyor error. For these reasons, it is unfair and scientifically misleading to suggest that the microphyll woodlands in the open area have somehow been damaged by recreational uses. There is no valid scientific data to support such the closure proposed in Alternative 8 of the RAMP. Please provide any relevant peer reviewed scientific data that would support such a closure. If no such data exists, the proposed camping closure at Washes 25 through 69 should be eliminated from further consideration.

- In the Mammoth Wash area, the closure of critical habitat (CH) to OHVs will result in a barrier between the east and west side of the open areas, increasing the chance of incursions into the CH. To address this problem, BLM should establish two or three vehicle paths or corridors through this CH area to allow vehicles to travel between the east and west open areas. Without designated connecting corridors, OHVs may travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.

- In the south dunes adjacent to the DBF campground, the CH creates a barrier between the Sand Highway on the west and the open area on the east. This barrier may result in incursions through the CH. As in the Mammoth Wash area discussed above, this problem could be eliminated by establishing a couple of travel corridors through this CH area at selected locations. These will allow for vehicle connections between the sand highway and the east open area. In addition, the travel corridors would permit emergency vehicles to access the open areas. Without designated connecting corridors, OHVs may travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.

Comments on specific sections of the DRAMP

- **Page 1-2 Section 1.1.1**

- According to the RAMP/EIS, “BLM seeks to provide a comprehensive management plan to . . . manage the Planning Area for recovery and delisting of the Peirson’s milk-vetch (PMV; *Astragalus magdalenae* var. *peirsonii*)” . However, the RAMP/EIS does not explain what constitutes “recovery” of the PMV. As there is no Recovery Plan for this species, BLM and the United States Fish and Wildlife Service (FWS) should articulate some criteria which, if met, would indicate that the PMV has recovered and may be considered for delisting.
 - To the extent that BLM or FWS have identified recovery criteria for the PMV, please identify the technical data from which these criteria were derived.
- There is no Environmental Species Act (ESA) requirement to close areas that the FWS has designated as CH for the PMV. Therefore, the RAMP/EIS must provide a rationale for closing all PMV CH to recreational use. That is, BLM must explain why the closures are necessary to the conservation and recovery of the species.

- **Page 1-3 Section 1.2**

- The BLM states "*Although not a part of the ISD SRMA, this Limited Use Area ERMA is included as a part of the Planning Area.*"
- If the " Extensive Recreation Management Area" (ERMA) around the ISDRA is governed by the "Northern and Eastern Colorado Desert Coordinated Management Plan" (NECO) , which route designation will hold sway, the NECO designation or the one proposed in the DRAMP? The legal route designations for the NECO area include the travel in navigable washes and the ability to camp within 300 feet of a designated route in the limited use areas of the NECO plan. Will these rights and restrictions be honored in the RAMP?
- Will BLM be required to amend the NECO plan to ensure consistency with the RAMP?
- Please explain if the navigable washes in the ERMA will continue to be available for OHV use. Also, will camping still be available within 300 feet of legal routes in this area?

- **Page 1-3 Section 1.2**

- Per this section a permit and a permit fee is required for the entire planning area, including the NECO ERMA. As there is no legal OHV access from this ERMA to the ISD "Special Recreation Management Plan" (SMRA), please explain how a fee can be charged for access to the ISD SRMA.
- Also, as it is legal to recreate in the NECO without paying a recreation fee, please explain how visitors that are not recreating at the ISD SRMA will be excluded from the requirement to pay the ISD SRMA recreation fee.

- **Page 2-65 Section 2.3.14.3.2 (Limited RMZ)**

- *"The Limited RMZ would be managed for its limited motorized recreational opportunities and for natural qualities. There are three potential types of limited opportunities in the RMZ. The Limited RMZ is also managed under the NECO and WECO plans where OHV travel is permitted on designated routes."* The RAMP must add navigable washes to the list of places where OHV travel is allowed in the limited use area of the NECO plan.
- **Page 2-68 Section 2.3.14.4 (Limited Areas)**
 - This section quotes the "California Desert Conservation Plan" (CDCA), which allows camping within 300 feet of the centerline of a route in Limited Use areas. Does this CDCA camping policy apply to the Ted Kipf Imperial County road? If not, please explain why not?
 - Ted Kipf road is listed in Table 2-15 as a route of travel. As this area may see increased camping use with any the periodic closure of the Dunebuggy Flats campground, the RAMP should clearly state that camping is allowed along this route.
- **Page 3-148 Section 3.18.4.3 On-Site Vendors**
 - This section describes the on-site vendor situation as it currently exists. The vendor definitions are those contained in the 2003 RAMP.
 - Appendix C seems to list vending requirements but is described as "Typical Management Actions and Best Management Practices" however this seems to be just boiler plate and does not seem to be actual requirements.
 - The RAMP does not describe the requirements for on-site vending; nor does it address the concerns of the existing vendors which have been expressed to BLM over the last six years.
 - Does the RAMP itself regulate on-site vending or do the district managers delegate that regulatory authority, through the RAMP, to the local field office?

- If the on-site vendor regulations are designated at the local district level, that fact should be disclosed in the RAMP document. On the other hand, if these on-site vendor regulations are designated by the RAMP, as was done in the 2003 RAMP document, then this RAMP should include a more detailed description of those regulations.
 - The vendor regulations from the 2003 RAMP were designed to address and control the ability of seasonal vendors to take business away from year-round local businesses. This is no longer a problem. The local businesses have set up locations on their private property to allow for seasonal vending. This negates the argument that the seasonal vendors on BLM land diminish the sales realized by local businesses.
 - BLM should adjust the 2003 vendor regulations so that vendors on BLM land can occupy their concessions without having to move off-site each week. As an alternative, BLM could expand the full-time vending locations to include Buttercup. This would be similar to the full-time location at the intersection of Gecko Road and Highway 78, and would be assigned via a lottery system.
- **Appendix D Page D-4 Table D-1**
 - **Vehicle Counters**
 - Please explain why the vehicle counters at some locations were omitted from this analysis. There are vehicle counters at Glamis Flats, Osborne Overlook and Dunebuggy Flats that should be included in the monitoring of visitor use patterns. This is critical given that each of these three areas will likely see significant changes in visitorship following implementation of any camping closure at Dunebuggy Flats, as contemplated under Alternative 8.
 - **Appendix O**
 - Photo at Page 8, Figure 3: This photograph has no business in this document. It is not germane to the discussion of bird monitoring at the ISD and is an inflammatory depiction of illegal OHV recreation. Moreover, it depicts a location that is not even

within the ISDRA. Finally, there is no way to substantiate that this is fact illegal OHV operation. By including this photograph in the bird report, the authors betray an inherent bias against OHV activity, which in turn renders the study's analysis and conclusions suspect.

- On Page 18 of the study, the authors indicate that they had "severe problems" with key aspects of their analysis, including:
 - Heaping (low frequencies of detections close to the observer, with much higher frequencies at specific distances for each bird species);
 - Small sample sizes; and
 - Surveyor tendency to mis-record distances.

As a result of the problems, "abundance estimates based on estimates of detectability were not helpful in relating patterns of abundance to covariates in the study area." (Page 18) This inability to discern patterns of abundance largely eviscerates the entire bird study and its conclusions.

- Ultimately, the RAMP/EIS should be careful **not** to rely heavily on the bird study for assertions that OHV use reduces bird abundance and diversity in the microphyll woodlands of the east dunes. The study itself cautions against drawing such conclusions: "Although we have found significantly more breeders and migrants at non-OHV use sites within the North Algodones Dunes Wilderness, these differences should not be assumed to result from recreation pressure alone. Rather, the habitat within the North Algodones Dunes Wilderness may simply be of higher quality than habitat outside the Wilderness." (Page 19)
- In addition, the authors of the bird study could not fully explain why the surveyors detected so many birds in the dunes wilderness. According to pages 20 and 21 of the report, the habitat parameters of the wilderness, while quite good, did not suggest that the bird numbers would be unusually high. The authors were of the opinion that surveyors counted many *juvenile* birds as adults, thus skewing the numbers. If this is true, then the comparison between the *wilderness* microphyll

woodland and the *open area* microphyll woodland, at least on the question of bird abundance and diversity, is invalid.

- **Appendix D (Precipitation Monitoring)**

- At page D-8, this documents states that *"BLM would monitor rainfall to assess the likelihood of PMV germination, and to determine whether the rainfall threshold is met (1.82 inches of rainfall during the months of October, November and December) that would trigger the closure of the Dunebuggy Flats campground. The closure of the Dunebuggy Flats campground in high rainfall years would add an additional layer of protection to allow PMV to germinate and set seed, thereby aiding in recovery of the species."* Nowhere, however, does the document explain the significance of the 1.82 inch rain threshold in terms of PMV germination or reproductive success. Likewise, the document does not explain why a camping closure, if imposed once the 1.82 rain threshold is met, will aid in the conservation and/or recovery of the PMV. Without such explanations, and without supporting technical data, the proposed rain threshold and attendant camping closure are completely arbitrary.
- If the intent is to have increased protection to the already closed CH areas perhaps increased law enforcement in these critical areas would be justified. The increased law enforcement costs could be paid for with the revenue that would have been lost by closing the campground. Increased closure signage would go a long way to preventing the inadvertent incursions that this campground closure seems to be trying to prevent.
- Please evaluate increased signage and law enforcement of closed CH areas rather than closing of recreation camping areas to provide your implied extra protection of the PMV.
- Also please take into account that throughout this document almost all credible studies consistently show that less than one percent of monitored plants are damaged by OHV operation. This statistic is consistent for monitoring of PMV (Page H-2, H-3 and H-6) and Algodones Dunes Sunflower (Page H-4, Section A.2).
- Data from other referenced studies show that many plants consistently show increased levels in areas open to OHV recreation. This has been shown in the BLM PMV monitoring and the Luckenbach and Bury report on page H-8. Quoting this report *"...what data were collected showed that PMV density and*

cover were actually higher in the OHV area than in the closed area...”

- It seems that neither the BLM nor FWS can explain why these plants seem to do as well in areas open to OHV than in areas closed to OHV recreation.
- Data such as this would question the advisability and need to restrict camping in areas adjacent to the proposed closed areas.



August 4, 2010

RAMP Team Lead
1661 S. 4th Street
El Centro, CA 92243

RE: Comments on Draft Recreation Area Management Plan/Draft Environmental Impact Statement

Dear RAMP Team Leader:

The Imperial County Air Pollution Control District (Air District) has finalized its review of the Draft Recreation Area Management Plan/Draft Environmental Impact Statement (DRAMP/DEIS) and is here by providing its comments which may assist in updating some of the sections of the report. For comprehension purposes, the Air District is first providing a "Background" section which presents the basis for some of our comments.

Background:

The Imperial County is currently federally designated as a "serious" non-attainment area for PM10 National Ambient Air Quality Standards (NAAQS) and "non-attainment" for PM2.5 NAAQS. These federal designations require that the Air District develops implementation plans which describe the mechanisms that will be used to bring particulate matter emission levels back into attainment as expeditiously as practicable. One of the mechanisms used by the Air District to reduce PM10 emissions was to develop and adopt fugitive dust rules for the Imperial County.

Rule 800 *General Requirements for Control of Fine Particulate Matter (PM-10)*, is one of several fugitive dust rules that were adopted by the Air District Board of Directors (Nov 2005) and approved by the California Air Resources Board (CARB) in an effort to reduce PM10 levels in Imperial County and bring the county into attainment. One of the requirements found in Rule 800, is that BLM submits a Dust Control Plan to the Air District every two years. The BLM's Dust Control Plan identifies sources of PM10 emissions within their jurisdiction as well as dust control measures that can be implemented to help minimize or eliminate those emissions. So far BLM has actively worked with the Air District and complied with the requirements of Rule 800.

Nevertheless, on February 3, 2010 the US.EPA published in the Federal Register a notice proposing Limited Approval and Limited Disapproval of Regulation VIII Dust Rules. Most recently, on July 8, 2010, the U.S. EPA finalized its proposed Limited Approval and Limited Disapproval of revisions to the Imperial County Air Pollution Control District portion of the

California State Implementation Plan under the Clean Air Act as amended in 1990. In the rulemaking US.EPA concluded that PM10 emissions from open areas such, as the Imperial Sand Dunes, are significant sources of PM10 which require Best Available Control Measures (BACM). Due to this recent ruling, at a very minimum, this RAMP must acknowledge that further analysis is required.

Air District Comments on DRAMP/DEIS Document:

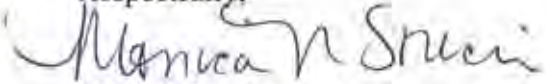
1. The Air District noticed the preferred alternative introduced in the DRAMP/DEIS, increases the total amount of "Open Areas" for OHV activity by almost 40,000 more acres than what is currently available. The DRAMP does not provide a detailed analysis of the impacts OHV can have on such a large and currently undisturbed area. Therefore the Air District is asking that this DRAMP analyze the impacts resulting from the increase.
2. Page 2-7, Section 2.3.2.2, Bullet #2, states "treat the following access roads for dust control to reduce the impact of OHV activities on air quality, as personnel and funding levels allow...". Please specify under what circumstances would personnel and funding levels would not be available to mitigate access roads. In addition, please provide in detail what would be your contingency measures to effectively control fugitive dust.
3. Page 2-7, Section 2.3.3.3, Bullet #3, states "implement actions to mitigate for contributions to the non-attainment due to activities in the Planning Areas, as requested by ICAPCD, and as personnel and funding levels allow". Please specify under what circumstances would personnel and funding levels would not be available to mitigate for emission contribution to the non-attainment area due to activities in the Planning Area. In addition, please provide in detail what would be your contingency measures to effectively control fugitive dust. Also please ensure that this section does not contradict the statements found in the first paragraph of section 2.3.2, page 2-6.
4. Page 2-35, Section 2.3.8.2, should mention in one of the bullets that BLM will contact the Air District prior to any pre-planned fire is ignited to ensure weather conditions are appropriate for burning. The Air District has a rule for *Open Burning* (Rule 421) and *Range Improvement Burning* (Rule 702) which are applicable within the geographical area of the Imperial County including the ISD.
5. Page 2-49, Section 2.3.13.1, should also state that any proposed projects/operations such as mining operations which activities involve surface disturbance must contact the Air District in advance to ensure the project/operations comply with applicable Air District rules and permits.
6. Page 2-84, Section 2.3.16.2.4, should also state that BLM should notify the Air District of the development of renewable energy projects as such projects also have the potential of creating dust emissions which might exceed the Air District's construction and operational thresholds.

7. Page 3-5, Section 3.2.2, last paragraph states there are six air quality monitoring stations maintained by the ICAPCD. Please note that the Callexico-East station was shut down recently. Once approved by EPA only five air quality monitoring stations will be in operation. Furthermore, the El Centro, Brawley, Westmorland and Niland stations are operated by the ICAPCD. The Callexico-Ethel station is operated by CARB.
8. Page 3-10, Section 3.2.2.4, should also provide a brief description of the current designation status for PM10 and PM2.5.
9. Page 3-11, Section 3.2.2.4, last paragraph must be revised to address the changes found in comment number seven (7).
10. Page 3-11, Section 3.2.2.5, second paragraph states “The wind picks up particles from disturbed and undisturbed surfaces, recreational travel on paved and unpaved roadways, construction and demolition activities, and farming operations such as crop burning”. Although most of the content on this statement is correct, the Air District would like to clarify that crop burning is not allowed every day. Crop burning is only allowed after the Air District had analyzed the daily meteorological and air quality data and determines whether the days conditions are acceptable for burning. Additional information regarding agricultural burning can be found in the Air District’s Smoke Management Plan.
11. Page 4-4, Section 4.2.2, the first sentence of the second paragraph states that “the ICAPCD considers recreational use of public lands to be exempt from their regulations for fine particulate matter under Rule 800, when the use of such lands is covered by the most recent BLM dust control plan in compliance with Rule 800.” Although this is a correct statement, the DRAMP must acknowledge and consider the most current decisions made by EPA which are found in the “Background” section of this letter.
12. Page 4-4, Section 4.2.2, the third paragraph in this section provides a brief description of a full conformity analysis and references 40CFR Part 93 as the basis for determining whether a project is significant. Significance unlike conformity is a study on a project’s impact to the environment. In keeping with BLM’s agency policy as stated in Section 2.3.2-Air Resources Management of the DRAMP, “The FLPMA and the Clean Air Act (CAA) of 1970 and Amendments of 1977 and 1990 (42 USC 7401 et seq.) prohibit BLM or any federal land management agency from conducting, supporting, approving, licensing, or permitting any activity on federal land that does not comply with all applicable local, state, and federal air quality laws, statutes, regulations, and implementations plans”. Therefore, the BLM must utilize the Imperial County CEQA Air Quality Handbook as guidance for determining significance. The resulting emissions of the air quality analysis conducted by BLM should be compared to the thresholds found in Table 1, (Thresholds of Significance for Project Operations) of the Imperial County CEQA Air Quality Handbook for determination of significance and submitted to the Air District for review.

13. Page 4-4, Section 4.2.2, Table 4-2 should be removed or revised so the thresholds coincide with those found in Table 1 of the Imperial County CEQA Air Quality Handbook.
14. Page 4-5, Section 4.2.2, Table 4-3 should also reference the thresholds found in Table 1 of the Imperial County CEQA Air Quality Handbook.
15. Page 4-6, Section 4.2.2, paragraphs one (1) and two (2) describe the emission rates, emission models and other sources of information used for calculating the projected emission caused by OHV activity. According to the DRAMP, "OHV recreational emissions were calculated using EPA's NONROAD Emissions Inventory Model for ATV's motorcycles, and sand rails, and the URBEMIS 2007 model for 4-wheel drive trucks. Fugitive dust emissions for ATVs and motorcycles were estimated using emissions rates from the South Coast Air Quality Management District, and fugitive dust emissions for 4-wheel drive trucks and sand rails were modeled by selecting travel on unpaved roads in the URBEMIS models." Unfortunately however, there are a couple of issues with this air emissions analysis. First, EPA's NONROAD Emissions Inventory Model is better used for calculating state-wide emissions and not area specific emissions. For a more complete air quality analysis the Air District requests that BLM utilize CARB's Off-Road Emissions Inventory Program and selects Imperial County specific off-road emissions. Secondly, the air quality analysis should also estimate the totals emissions from on-road vehicles (motor-homes, cars, truck, etc...) that travel through unpaved camping grounds as well as through unpaved roads. CARB's EMFAC 2007 model can provide the emissions estimates for these types of motor vehicles.
16. The DRAMP must include the URBEMIS output reports, the *Social and Economic Impacts of Recreation Activities and Background Parameters Report* ("CIC Research") and the *2006 Visitor Profile Report* (Haas and Collins) as well as any other modeling source documents as part of the appendices for the public's review.
17. Page 4-6, Section 4.2.2., paragraph five (5), as previously stated above in comment eleven (11), the air emission results should be compared to the thresholds found in the Imperial County CEQA Air Quality Handbook. If the emissions exceed the thresholds, then the project is found to be significant.
18. Page 4-6, Section 4.2.2., last paragraph should be removed from this section or revised to address comment number eleven (12).
19. Volume II, Page C-7, the discretionary mitigation measures for construction activities found in this section do not reflect the standard mitigation measures for fugitive PM10 control or construction combustion equipment found in Section 7 of the 2007 Imperial County CEQA Air Quality Handbook. Please revise this section as per the Imperial County CEQA Handbook.

In conclusion, the Air District looks forward to continue working collectively with BLM to ensure proper and economically feasible dust control measures are in place, especially in areas designated open to off-highway vehicle (OHV) usage. If you have any questions regarding the comments above, please do not hesitate to contact me at (760) 482-4606.

Respectfully,

A handwritten signature in cursive script that reads "Monica N. Soucier". The signature is written in dark ink and is positioned to the left of the printed name.

Monica Soucier

Air Pollution Control Division Manager

**DESERT PROTECTIVE COUNCIL
P.O. BOX 3635
SAN DIEGO, CA 92163**

RAMP Team Lead
1661 South 4th Street
El Centro, CA 92243
VIA email to cais@ca.blm.gov

August 4, 2010

Dear Ms. Dreyfuss and RAMP Team,

On behalf of the Desert Protective Council (DPC), thank you for the opportunity to comment on the Draft Recreation Management Plan and Draft EIS for the Algodones Dunes, also known as the Imperial Sand Dunes.

For decades, the DPC and its members and friends have visited and enjoyed the Dunes both north and south of highway 78 and south of highway 8. We cherish the Algodones Dunes, the largest dune system in North America.

The Importance of the Algodones Dunes to the Desert Protective Council

Between 2000 and 2004, Terry Weiner monitored the 60-acre protective closure south and west of the Buttercup Campground to observe the seasonal changes to a couple of populations of the Peirson's Milk-vetch on western end of the closure. I would stop at the Buttercup campground whenever I was on my way to Arizona or to camp out in the Indian Pass area. As you know, beginning in 2000, the Buttercup closure was one of the most troublesome to manage. The boundaries were regularly violated, especially the northern boundary. Despite regular ORV trespass in that closure after the closure signs were installed, the recovery of some of the dunes vegetation community within the closure boundaries was noticeable within two years. The contrast in vegetative cover between the 60 acres within the closure boundaries and the recreation area around it was rather impressive. Virtually no plant life exists in immediate Buttercup area with the heavy ORV use.

The Desert Protective Council submitted comments on both the 1987 ISD RAMP and on the 2003 RAMP. DPC also participated in the rare plant surveys in the Wilderness Area conducted by BLM El Centro and CA Fish and Game between 1999 and 2002, doing transects from the west to the east side. We have camped out overnight in the wilderness area and have hiked across the larger dunes south of Highway 78, camping overnight within the large closure area. The experience of hiking in the Algodones Dunes is one of great peacefulness and magnificent beauty. The Algodones Dunes offer an opportunity for discovery of unique plants and animals; for example, the odd and beautiful sand food plant (*Pholisma sonora*) and the Dunes Scarab Beetle. We value the Algodones Dunes system for its extraordinary beauty and its complement of endemic dune species, some of which live nowhere else in North America. We also cherish

the historical and Native American cultural heritage integral to the Algodones Dunes. These are the values we consider most important for protection for this and future generations of humans. See Attachment B, a poem written by a DPC member regarding his experience of the dunes.

The Imperial Sand Hills National Natural Landmark

The Department of the Interior highlighted the uniqueness of this area by designating the “Imperial Sand Hills” as a **National Natural Landmark** in 1966. From the Department of Interior’s National Natural Landmarks Program” page: **“The National Natural Landmarks Program recognizes and encourages the conservation of outstanding examples of our country’s natural history. It is the only natural areas program of national scope that identifies and recognizes the best examples of biological and geological features in both public and private ownership. National Natural Landmarks (NNLs) are designated by the Secretary of the Interior, with the owner’s concurrence. To date, fewer than 600 sites have been designated.”** From Federal Register/Vol. 64, No. 91/Wednesday, May 12, 1999, /Rules and Regulations, pg. 25708:

“National natural landmark designation.....does not dictate activity. However, Federal agencies should consider impacts to the unique properties of these nationally significant areas in carrying out their responsibilities under the National Environmental Policy Act (42 U.S.C. 4321 et seq.).”

In considering your final preferred alternative from which to develop a management strategy for this vast, unique sand dune ecosystem, the Desert Protective Council believes that the Bureau of Land Management’s priority should be protection and preservation of the features and resources for which the Dunes were designated a National Natural Landmark.

BLM Imperial Sand Dunes Draft RAMP and Draft EIS 1.0 Introduction: Section 1.6 Overall Vision

The statement that BLM “will strive to provide a world class recreational experience, while aiding in the recovery of listed species” indicates inverted priorities. The term *world-class recreational experience* needs defining. Generally in the past when managers of BLM El Centro have used the phrase world-class recreational experience, they are referring primarily to providing for ORV recreation. In your final EIS, please define the phrase. The vision statement mentions, “aiding in the recovery of listed species.” The DPC encourages the BLM to include in your vision protection of the entire suite of Algodones dunes ecosystem plants, We support the BLM in considering the public’s “needs and stakeholder values” and in providing for appropriate recreation at the Algodones Dunes, but we believe that the public should include visitors from all over the United States and from other countries as well as people from southern California and Arizona who want to use the dunes for driving their off-road vehicles (ORVs). Off-road vehicle use is by its nature a consumptive, polluting and damaging use of a fragile ecosystem. Where intensive ORV activity is taking place, all other users are effectively driven out of the area and resources are adversely impacted. Resource impacts are commented upon in documents submitted on this draft management plan by Thomas Olsen and Associates and Arthur Philips.

The Imperial Sand Dunes Draft Recreation Area Management Plan

The Desert Protective Council believes that this Management Plan for the dunes should actually be a draft *Resource Management Plan* and consideration of appropriate motorized and non-motorized recreation, hunting, industrial development, concession leasing and transportation corridors should be appraised in relation to protecting our natural and cultural heritage in the dunes. We accept the fact that for several decades the Algodones Dunes have been promoted primarily as an off-road vehicle recreation area and that the use so dominates other uses that in order to manage the natural and cultural resources, the BLM has focused its resources primarily on managing this intensive use. In this context, I will address the section in the description of alternatives related to recreation management.

Section 2.3.14.1 through 2.3.14.4 Recreation Resource Management, Pages 2-55 to 2-67

The fact that off road (ORV) vehicle recreation and motorized camping constitutes the majority of visitation to the Planning Area is a direct result of the fact that the BLM has traditionally promoted and managed the Algodones Dunes primarily as an ORV Recreation Area. Unfortunately, none of the alternatives in this current Draft Plan support changing this tradition.

The other uses listed on page 2-55 occur to a lesser degree because they are not encouraged.

- For example, there is essentially no safe place to park a car and access the west side of the Wilderness Area north of highway 78.
- There are no pit toilets anywhere on the boundaries of the wilderness area.
- Although one can find places to pull off the road and park on the east side of the wilderness, it is not considered safe to leave a car there overnight. It is a very long hike from the east side of the wilderness to get to the actual dunes.
- If one parks a car at the Cahuilla Ranger station, one has to cross highway 78 to reach the wilderness area, which is dangerous
- The Cahuilla Ranger station does not have adequate parking for day use by more than a few people.

We support BLM El Centro in implementing the three primary goals for the BLM Recreation program as listed in points 1 through 3 at the top of page 2-56, Volume I, which involved improving access to recreation opportunities, ensuring a quality of experience and enjoyment of natural and cultural resources on DOI-managed lands and to provide for and receive fair value in recreation.

In section 2.3.14.2 under General Management Actions Common to All Alternatives, we have some specific suggestions regarding developing or retrofitting facilities to accommodate visitation and meet the social needs of visitors. Informational kiosks could be installed at the Osborne Overlook Area and a pedestrian crossing could be marked on the highway. On the north side of highway 78 across from the Osborne overlook a wooden or trexel platform could be built and a kiosk installed. At the Corral Pink Sand Dunes State Park in Utah and at the Indiana Dunes National Lakeshore, for example, there are hard-surfaced trails into the dunes, with markers along the route, describing the noteworthy plants and animals of the dunes. Some dunes

have trexel or other-surface paths for visitors to walk a short distance out into the dunes and enjoy the view and feeling of vastness. There could be a panorama display informing visitors of the different types of dunes within the Algodones Dunes System.

Page 2-59 mentions expanding visitor education regarding pack it in pack it out' principles and Leave no Trace ethics. Please add a bullet point for a management action about adding interpretation to visitor education. The BLM could attract "world-class" (as in from all over the world) visitors to the dunes to enjoy the natural qualities of the by promoting the dunes for their magnificence and silence by promoting opportunities for people who would like to enjoy the nature of the dunes. When we non- off-road recreationists want to go to the Dunes to hike in the wilderness or camp anywhere within the boundaries of the planning area, hikers, birders, photographers must pay the daily \$25.00 fee, which we are happy to do, but currently we are only subsidizing facilities and opportunities for the off road motorized user.

Proposed Alternatives

In reviewing your eight proposed alternatives, the Desert Protective Council finds that we are not able to support any of them entirely because:

- 1- none of them fully protect the Critical Habitat for the federally listed Peirson's Milk-vetch from motorized use;
- 2- none of the alternatives fully protects the habitat of the federally listed Mojave desert tortoise from camping and motorized use or motorized corridors;
- 3- None of the alternatives exclude solar development. The Algodones Dunes should not be made available for industrial solar, geothermal or wind energy development projects.
- 4- None of the alternatives protects the myriad Native American cultural resources, many of which have not yet even been evaluated. (Appendix J pages J 1-8)

Appendix F, comparing numbers of acres to be made available for the various types of industrial energy projects is confusing. There does not seem to be any rhyme or reason for the numbers of acres proposed to be made available under each alternative.

Section 4.2 Impacts on Air and Atmospheric Values pages 4.3- 4.8

Does the information in Section 4.2.2 Criteria Pollutant Emissions reflect the final ruling by the EPA, which issued limited approval and limited disapproval of revisions to the Imperial County Air Pollution Control District portion of the CA State Implementation Plan (SIP) under the Clean Air Act? This ruling was published in the Federal Register on February 23 2010 concerning local rules that regulate coarse and particulate matter (PM10) emissions from sources of fugitive dust such as construction sites, unpaved roads, and disturbed soils in open and agricultural areas in Imperial County. Under this ruling the EPA directed Imperial County APCD to revisit Regulation VIII, rules 800-806 pertaining to contributions to particulate pollution in Imperial County from various sources, including off-road vehicles open areas. ORV emissions on BLM land may no longer be exempt from analysis under the revised Imperial County SIP. How is the BLM addressing the changes to the Imperial County SIP? Does the BLM still plan to do a Fugitive Dust Control Plan identifying dust control measures that can be implemented to help

minimize or eliminate emissions? What sort of dust control plan would be able to suppress the airborne particulates from hundreds of dune buggies traveling at speeds of 15 mph and up over the fine sand of the dunes? The Planning area is already exceeding the *de minimis* threshold for PM10 emissions and only alternatives two and three do not increase the current tonnage of CO2 emissions per year. With the help of the EPA, the BLM El Centro needs to embark upon air quality monitoring similar to the monitoring done by Imperial County at five or six sites throughout the county. The EPA has acknowledged the connection between Imperial County's non-attainment of standards of PM 10 and the high asthma rate in Imperial County. Whether or not the huge tonnage of CO2, VOCs, PM10 and PM2.5 and other pollutants associated with the internal combustion engine produced annually from ORV recreation in the Planning Area, can be analyzed as contributing to climate change, the fact is that increased PM 10 adversely affects air quality and human health. I incorporate the June 15 2010 letter from EPA Administrator Jared Blumenfeld and include it as an attachment to these comments. I am also attaching the 2008 Center for Biological Diversity Report on ORV Emissions in the state of California: *Fuel to Burn*.

Appendix H- Reports of Special Status Plant Species within the Planning Area

Section A. 1 Peirson's Milk-Vetch pgs. H2-4, Volume II

Peirson's Milk-Vetch (PMV) is an Algodones Dunes endemic, is known to live only at the Algodones Dunes and down into the Dunes south of the international border with Mexico. For this reason, all extant populations of the plant should be protected. Critical habitat should be protected where PMV seed banks are located, since, according to research, PMV seed banks have shown to be significant for long-term survival of the species. On page H-3 of Appendix H, the BLM states that seed densities were significantly lower in areas where OHV Recreation occurs and highest in areas closed to OHV Recreation.

Since Critical Habitat for the PMV is still being adjudicated, it does not make any sense to delineate Critical Habitat until the final ruling comes down. Thus, the BLM should not decide upon a final alternative until the ruling is made. The final management alternative preferred and chosen by the BLM must include protecting all of the PMV Critical Habitat from motorized use.

Appendix D, Page D-5

Flat-Tailed Horned Lizard

Since this species is being reviewed for federal listing as threatened by the USF&WS, the BLM El Centro needs to err on the side of caution and protection. Meanwhile, please protect the FTHL's habitat in all of the El Centro Resource Area's FTHL Management areas from disturbance, and for purposes of this planning process, on the East Mesa.

The Desert Protective Council looks forward to continuing participation in the planning process for our Algodones Dunes. Please keep the DPC on your email list for all notices regarding the Draft Management Plan and Draft Environmental Impact Statement.

We deeply appreciate the huge amount of research and time that BLM El Centro Field Office has devoted over the last decade and longer to craft a management plan for the Algodones dunes ecosystem that will protect this National Natural Landmark for present and future generations.

Sincerely,

Terry Weiner
Imperial County Projects and Conservation Coordinator
Desert Protective Council
P.O. Box 3635
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www.desertblog.net

At the Algodones Dunes

Tan

desert sand

is heaped in ancient

waves, breaking over and

roiling silently, in

stillness and sun.

We shuffle up

The slipface, we are seeking the

reclusive endangered species and we are wanting.

We walk in psammophilic wonder in—we have botany, and taxonomic differentiation to

worry about—plus our cars, and bills waiting at home (where we get our mail but

not where we're from). Desert plants have shallow roots: they extend

many meters, and their seeds can travel long distances on

the wind, but listen; we saw a four-foot tuft of grass

rustle in the dry hot breezes, we know it has

softly swayed in this very spot for

a century or two yet we

walk, with yearning

for our own

Home.

We

wander over the

dunes together, stem and root

and mind and compassion, we slip through the

sands, you and I, and eventually the seed lands, we watch

the rain (the promise fulfilled) fall, we turn our palms up to the sky.

The grains of the Algodones roll downwind, bury the roots,

expose the new soft stems, and we are fragile too, like

fresh spring leaves in the hot sun, we fear

desiccation, boredom, indifference,

predation; we are unsure

that once planted, we

will, assuredly

bloom.

Jim Ricker (jamesrickersd@gmail.com)

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2010-0120; FRL-]

Revisions to the California State Implementation Plan, Imperial
County Air Pollution Control District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is finalizing a limited approval and limited disapproval of revisions to the Imperial County Air Pollution Control District (ICAPCD or the District) portion of the California State Implementation Plan (SIP) under the Clean Air Act as amended in 1990 (CAA or the Act). This action was proposed in the Federal Register on February 23, 2010 and concerns local rules that regulate coarse particulate matter (PM₁₀) emissions from sources of fugitive dust such as construction sites, unpaved roads, and disturbed soils in open and agricultural areas in Imperial County.

EFFECTIVE DATE: This rule is effective on [Insert date 30 days from the date of publication in the Federal Register].

ADDRESSES: EPA has established docket number EPA-R09-OAR-2010-0120 for this action. The index to the docket is available electronically at www.regulations.gov and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed in the index, some

information may be publicly available only at the hard copy location (e.g., copyrighted material), and some may not be publicly available in either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Andrew Steckel, EPA Region IX, (415) 947-4115, Steckel.andrew@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, "we," "us" and "our" refer to EPA.

Table of Contents

- I. Summary of Proposed Action
- II. Public Comments and EPA Responses
- III. EPA Action
- IV. Statutory and Executive Order Reviews

I. Summary of Proposed Action

On February 23, 2010 (75 FR 8008), EPA proposed a limited approval and limited disapproval of the following rules listed in Table 1, known collectively as Regulation VIII, that were adopted by ICAPCD and submitted by the California Air Resources Board (ARB) for incorporation into the California SIP for the Imperial County serious PM₁₀ nonattainment area.

Table 1

Local Agency	Rule #	Rule Title	Adopted	Submitted
ICAPCD	800	General Requirements for Control of Fine Particulate Matter	11/08/05	06/16/06
	801	Construction & Earthmoving Activities	11/08/05	06/16/06
	802	Bulk Materials	11/08/05	06/16/06
	803	Carry Out & Track Out	11/08/05	06/16/06
	804	Open Areas	11/08/05	06/16/06
	805	Paved & Unpaved Roads	11/08/05	06/16/06
	806	Conservation Management Practices	11/08/05	06/16/06

We proposed a limited approval because we determined that these rules improve the SIP and are largely consistent with the relevant CAA requirements. We simultaneously proposed a limited disapproval because some provisions of the rules conflict with the CAA section 110(a) requirement that SIP rules must be enforceable and the requirement in section 189(b)(1)(B) for implementation of best available control measures (BACM) in serious PM₁₀ nonattainment areas such as Imperial County. We

discuss these statutory requirements and the Regulation VIII deficiencies in detail in the proposed rule and in the Technical Support Document for that proposal (proposal TSD).¹ In the proposed rule and proposal TSD we also discuss our determination of which fugitive dust source categories addressed by Regulation VIII are significant and consequently require BACM pursuant to EPA guidance. This determination was based in part on our 2009 decision² to not concur with the State's request pursuant to EPA's exceptional events rule³ (EER) to exclude certain exceedances of the PM₁₀ National Ambient Air Quality Standard (NAAQS) in Imperial County from consideration in regulatory actions under the CAA.⁴

We summarize the Regulation VIII deficiencies addressed in our proposed rule below. These deficiencies concern Regulation VIII provisions relating to open areas, unpaved roads and agricultural lands.

A. BACM-Related Deficiencies for Open Areas

1 Our proposed rule and proposal TSD also describe additional improvements that we recommend for future ICAPCD modifications of the rules. This final action is not based on those recommendations. As a result, we do not respond here to all comments we received on them.

2 Letter with enclosure from Laura Yoshii (EPA), to James Goldstene (ARB), Re: exceptional events requests regarding exceedances of the PM₁₀ NAAQS in Imperial County, CA, December 22, 2009.

3 40 CFR 50.1(j) and 50.14.

4 Issues related to the Regulation VIII deficiencies, significant source categories and our decision not to concur with the State's

1. Recreational Off-Highway Vehicle Activity

While recreational off-highway vehicle (OHV)⁵ activity causes much of the PM₁₀ emissions from open areas in Imperial County, Rule 804 regulates only a small portion of these emissions, including those from OHV activity on State lands on which the rule is not being implemented. The vast majority of the OHV emissions in Imperial County are addressed only by requirements in Rule 800 section F.5 for dust control plans (DCPs) for sources under the control of the Bureau of Land Management (BLM). While BLM is required to describe in the DCPs the dust control measures that it intends to implement, BLM is not required to implement any specific BACM-level controls for OHV use. Moreover, ICAPCD has not provided an analysis of BACM for OHV activity, including potential OHV activity in open areas and on unpaved roads and paths that are exempt from the specific requirements and measures in Rules 804 and 805. The proposed rule and proposal TSD address how ICAPCD can correct these deficiencies.⁶

2. Definition of "Disturbed Surface"

The term "disturbed surface area" is used in several

exceptional events requests are addressed further below in our responses to comments we received on the proposed rule.

⁵ As used here and in the proposal TSD, the term "off-highway vehicle" or OHV includes all vehicles subject to the exemption in Rule 800 section E.6 for recreational use of public lands in Imperial County.

⁶ 75 FR 8008, 8010-8011 and our proposal TSD, section III.B.1.

Regulation VIII rules but is never defined. For example, Rule 804 applies to a source category for which BACM is required and relies on the undefined term to describe rule applicability in Rule 804 section B. A definition of this term is necessary in order to ensure that these rules are enforceable at a BACM level.

B. BACM-Related Deficiencies for Unpaved Roads

1. Unpaved Non-Farm Roads

While CAA section 189(b)(1)(B) requires ICAPCD to implement BACM by 2008 (i.e., four years after reclassification to serious),⁷ Rule 805 section E.7 allows the County until 2015 to stabilize heavily-travelled unpaved roads. This schedule is inconsistent with the statutory requirement and ICAPCD has not provided adequate evidence that this schedule is as expeditious as practicable, based upon economic feasibility or any other appropriate consideration. In addition, Rule 805 section E.7's requirement to stabilize all non-exempt unpaved County roads is not adequately enforceable as currently structured because it is not clear that the County is required to implement (and not just submit) a stabilization plan; stabilize different unpaved roads each year; and maintain all stabilized roads. The proposed rule and proposal TSD address how ICAPCD can correct these

⁷ On August 11, 2004, EPA reclassified Imperial County as serious nonattainment for PM₁₀. 69 FR 48835. Since 2008 has passed, BACM is now required to be implemented as expeditiously as practicable. *Delaney v. EPA*, 898 F.2d 687 (9th Cir. 1990).

deficiencies.⁸

2. Unpaved Farm Roads and Traffic Areas

Rule 805 section D.2 exempts agricultural roads and traffic areas from the opacity and stabilization requirements applicable to non-agricultural operation sites. Farm roads and traffic areas are only required to implement a conservation management practice (CMP) from the menus for unpaved roads and traffic areas in Rule 806 in contrast to analogous rules in other geographical areas.

Rule 806 sections E.3 and E.4 list CMPs intended to control emissions from agricultural unpaved roads and traffic areas but these measures are broadly defined and there is no other mechanism in the rule to ensure specificity. The absence of sufficiently defined requirements makes it difficult for regulated parties to understand and comply with the requirements, and makes it difficult for ICAPCD or others to verify compliance and to enforce the requirements if necessary. The lack of specificity similarly renders it difficult to assess whether the measures constitute BACM level controls. The proposed rule and proposal TSD address how ICAPCD can correct these deficiencies.⁹

3. Border Patrol Roads

Rule 800 section F.6.c exempts roads owned or operated by the U.S. Border Patrol (BP) from Rule 805 requirements that are "inconsistent with BP authority and/or mission." It is not clear

⁸ 75 FR 8008, 8011 and our proposal TSD, section III.B.3.

what this exemption is intended to address, or how it would be implemented and enforced in order to meet BACM requirements. The proposed rule addresses how ICAPCD can correct these deficiencies.¹⁰

C. BACM-Related Deficiencies for Agricultural Lands

1. Tilling and Harvesting

Rule 806 sections E.1 and E.2 list CMPs intended to control emissions from agricultural land preparation and cultivation (including tilling), and harvest activities, but these measures are broadly defined and there is no other mechanism in the rule to ensure specificity. The absence of sufficiently defined requirements makes it difficult for regulated parties to understand and comply with the requirements, and makes it difficult for ICAPCD or others to verify compliance and to enforce the requirements if necessary. The lack of specificity similarly renders it difficult to assess whether the measures constitute BACM level controls.

In addition, Rule 806 section E requires one CMP from the "land preparation and cultivation" category and one CMP from the "harvesting" category, while rules in other geographic areas have more stringent requirements.

The proposed rule and proposal TSD address how ICAPCD can

9 75 FR 8008, 8011 and our proposal TSD, section III.B.4.

10 75 FR 8008, 8011.

correct these deficiencies.¹¹

2. Windblown Dust

Windblown dust from non-pasture agricultural lands is also a significant source of PM₁₀ that requires BACM independent of agricultural tilling. The CMPs in Rule 806 section E, however, mainly control emissions by reducing the number of vehicle passes across fields, and sources are not required to select BACM level practices for controlling windblown dust from active or fallow agricultural fields. The proposed rule and proposal TSD address how ICAPCD can correct these deficiencies.¹²

D. Non-BACM Deficiency

Rule 802 section D.1 allows the Air Pollution Control Officer (APCO) to set aside controls that might be used instead of water to stabilize surfaces of bulk materials. This discretion allows ICAPCD to approve alternatives to the applicable SIP without following the SIP revision process described in CAA section 110. Moreover, ICAPCD has not demonstrated why such discretion is needed for measures such as covering, enclosing or sheltering material piles. The proposed rule addresses how ICAPCD can correct these deficiencies.¹³

II. Public Comments and EPA Responses

EPA's proposed action provided a 30-day public comment

11 75 FR 8008, 8011-8012 and our proposal TSD, section III.B.4.

12 75 FR 8008, 8012 and our proposal TSD, section III.B.4.

13 75 FR 8008, 8012.

period. During this period, we received nine unique comment letters from public agencies and broad-based organizations.

- Brad Poiriez, Air Pollution Control Officer, Imperial County Air Pollution Control District, March 25, 2010 (ICAPCD).
- Daniel Steward, Acting Field Manager, United States Department of the Interior, Bureau of Land Management, El Centro Resource Area, March 24, 2010 (BLM).
- Kathleen Dolinar, District Superintendent, Ocotillo Wells District, California State Parks, Off-Highway Motor Vehicle Recreation Division, by email dated March 24, 2010 (OWD).
- Gail Sevrens, Acting District Superintendent, Colorado Desert District, California State Parks, by email dated March 25, 2010 (CDD).
- David P. Hubbard, Gatzke Dillon & Balance LLP, on behalf of EcoLogic Partners, Inc., March 25, 2010 (EcoLogic).
- Lisa T. Belenky, Senior Attorney, Center for Biological Diversity, March 25, 2010, representing several listed parties (CBD).
- Jose Luis Olmedo, Executive Director, Komite Civico Del Valle, Inc., March 25, 2010, submitted and joined by other parties (Comite).
- Ayron Moiola, Executive Director, Coalition of Labor, Agriculture & Business, March 24, 2010 (COLAB).

- Mark McBroom, President, Imperial County Farm Bureau, March 24, 2010 (Farm Bureau).

We also received over 100 comment letters from individuals and organizations associated with recreational OHV activities. We reference these comments below by their identification in the federal docket management system (FDMS) found at regulations.gov.

For example, the comment listed in FDMS as document number "EPA-R09-OAR-2010-0120-0219" is referenced below as "0219."

We summarize the comments and provide our responses below. In our responses we identify specific commenters in some cases but not in others, particularly where many commenters made similar points.

A. General

These overarching comments largely provide general support or opposition to our proposal.

General #1: CBD and Comite support EPA's proposal to find that the Regulation VIII submittal does not fully implement BACM level controls for all significant source categories in Imperial County, and support EPA's nonconcurrency with associated exceptional event requests. They ask EPA to finalize the proposed limited disapproval of Regulation VIII and to require additional PM₁₀ emissions restrictions. Many other commenters disagree with EPA's proposed limited disapproval, especially with EPA's identification of deficiencies for BACM requirements and

EPA's nonconcurrence with exceptional events. ICAPCD, for example, believes that EPA's proposal is arbitrary and capricious, and that California has demonstrated that all required BACM are being implemented in Imperial County.

Response: No response is necessary for the overarching statements of support or opposition. Responses are provided below to the specific comments that support these general statements.

General #2: Several commenters believe that EPA's proposal lacks adequate scientific support. One (0144), for example, states that passing sweeping air quality regulations in an area with unique terrain and climate with only generalities to prove the sources of pollution is unethical and appears anti-development, anti-OHV and anti-agriculture.

Response: The scientific support for EPA's action is documented in our proposal and the associated proposal TSD and discussed further in response to specific comments below. See, for example, response to comment EI #3 below. The serious health impacts of exposure to elevated levels of PM₁₀ are well known and well documented and need not be reiterated here.

General #3: ICAPCD objects to EPA taking over four years to act on its submittals of Regulation VIII for approval and claims that EPA is only now raising basic issues that ICAPCD believes should have been resolved before rule adoption. For example,

ICAPCD objects to EPA disapproving a definition that it claims is clear and understood by all affected parties. ICAPCD and others (e.g., COLAB) comment that EPA never raised this and other concerns despite ICAPCD's extensive public process and communication with EPA before rule adoption. ICAPCD also cites EPA's testimony before the District Board in which the Agency supported Regulation VIII as BACM. As a result, ICAPCD concludes that EPA's proposal undermines ICAPCD's ability to rely on EPA comments in the future.

Response: EPA reviews and comments on many draft State and local agency rules during their development prior to submittal to EPA for formal approval. It is generally more efficient for all parties to identify and resolve issues early in the process, rather than after rules are adopted and submitted to EPA for inclusion into the SIP. EPA's formal action on local rules, however, can only occur through notice and comment rulemaking after rules have been officially submitted to EPA by the State. If EPA determines during that process that a submittal does not fulfill relevant CAA requirements, we cannot approve the submittal. Given time and resource constraints, it is not always possible for the Agency to identify or analyze fully all issues before State or local rule adoption. Moreover, EPA must carefully consider all public comments submitted on proposed EPA actions on State and local rules. Such comments often identify issues and

concerns that may not have arisen during the prior evaluation of drafts of a rule. We continue to believe, however, that communication between EPA and State and local agencies at the rule development stage is productive.

General #4: OWD asks EPA to extend the comment period because it was informed of EPA's proposal only nine days before the close of the comment period. Several commenters also state that EPA did not provide adequate notification time (0218.1 and 0098) or consultation with State Park personnel (0218.1 and OWD).

Response: EPA denied OWD's request to extend the comment period because EPA is under a court order¹⁴ to finalize action by June 15, 2010, and needs time to analyze all comments submitted on the proposal.¹⁵ While more time and outreach before EPA action is always desirable, nothing in the comments suggests that EPA failed to follow relevant public notification requirements found in the Administrative Procedures Act.¹⁶ EPA notes that OWD did comment on the proposal and EPA has taken those comments into consideration in the final action.

B. State Implementation Plan (SIP)

These comments generally address broad SIP issues rather than specific Regulation VIII provisions.

14 *Comite Civico Del Valle, Inc., v. Jackson*, No. 09-cv-04095 PJH (N.D. Cal.).

15 Email from Andrew Steckel, EPA, to Kathleen Dolinar, California State Parks, March 29, 2010.

16 See 5 U.S.C. 553.

SIP #1: OWD believes the PM₁₀ standard is nearly impossible to attain given Imperial's climate, natural desert condition, the cost of inappropriate BACM, and other local conditions. In contrast, Comite asks EPA to find that California has failed to submit a PM₁₀ plan as required by 72 FR 70222 (December 11, 2007), and to consider imposing associated CAA section 179 sanctions and a section 110(c) federal implementation plan (FIP) in this area.

Response: Our proposed action addresses the CAA section 189(b)(1)(B) requirement for BACM for certain PM₁₀ sources in Imperial County. The submittal at issue, Regulation VIII, is but one portion of the complete SIP that ICAPCD must develop in order to meet additional CAA requirements. These comments address the separate and broader statutory obligations for the State to submit a PM₁₀ plan that, among other things, demonstrates expeditious attainment of the PM₁₀ NAAQS. Those other obligations are not the subject of this action.

SIP #2: ICAPCD does not believe that any additional controls such as those that may need to be implemented if EPA partially disapproves Regulation VIII will prevent PM₁₀ exceedances during high winds or otherwise materially benefit air quality on days unaffected by high winds. ICAPCD further believes that such additional controls will waste limited resources that should be used in other ways to improve local air quality in the area.

Response: CAA section 189(b)(1)(B) and EPA guidance¹⁷ require that BACM be implemented for all significant source categories¹⁸ in serious PM₁₀ nonattainment areas such as Imperial County. As explained in our proposal,¹⁹ we determined that each of the subcategories under open areas, unpaved roads and agricultural lands below meet or exceed the 5 µg/m³ de minimis level in our guidance and are therefore significant source categories in Imperial County:

Open areas:

- Windblown Dust, Other Open Area.

Unpaved roads:

- Entrained Unpaved Road Dust, City/County.
- Entrained Unpaved Road Dust, Canal.
- Windblown Dust, Unpaved City/County Road.
- Windblown Dust, Unpaved Canal Road.
- Windblown Dust, Unpaved Farm Road.

Agricultural lands:

17 "State Implementation Plans for Serious PM-10 Nonattainment Areas, and Attainment Date Waivers for PM-10 Nonattainment Areas Generally; Addendum to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990;" 59 FR 41998 (August 16, 1994) (General Preamble Addendum).

18 Under the General Preamble Addendum, a source category "will be presumed to contribute significantly to a violation of the 24-hour NAAQS if its PM₁₀ impact at the location of the expected violation would exceed 5 µg/m³." This is also referred to as the de minimis level. *Id.* at 42011.

19 75 FR 8008, 8010, and proposal TSD, pp. 5-7.

- Tilling.
- Windblown Dust, Non-Pasture Agricultural Lands.

As EPA stated in the guidance, the structural scheme throughout title I of the CAA, including its provisions for the PM₁₀ NAAQS, requires the implementation of increasingly stringent control measures in areas with more serious pollution problems. EPA further stated "that the more serious the air quality problem, the more reasonable it is to require States to implement control measures of greater stringency despite the greater burdens such measures are likely to cause."²⁰ Imperial County continues to violate the PM₁₀ standard²¹ and our proposed action identifies several components of the State's Regulation VIII submittal relating to open areas, agricultural lands and unpaved roads that do not fulfill the CAA BACM requirement and the enforceability requirements of CAA section 110(a).

We further address ICAPCD's contention that additional Regulation VIII controls will not prevent PM₁₀ exceedances during high winds in our response to comment EE #1 below.

SIP #3: Many commenters emphasize the importance of OHV areas in Imperial County for recreation, and believe that

²⁰ General Preamble Addendum at 42010.

enjoyment of the desert should not be restricted. Commenters note that many organizations help keep the desert clean, and one commenter (0175.1) believes such efforts would be reduced if OHV areas are closed.

Response: Recreation, enjoyment of the desert and clean deserts are certainly desirable, whether for OHV use or otherwise. However, except as implicit in our response to comment OHV #5 below, they are not germane to the evaluation in our proposal and in this final rule of Regulation VIII and its compliance with the applicable CAA requirements.

SIP #4: Two commenters (OWD and 0218.1) question whether EPA's proposal is based on statistically significant data since there were only three PM₁₀ exceedances within a three year period.

Response: ICAPCD's obligation to implement BACM for Regulation VIII fugitive dust sources derives from the Imperial County's designation as nonattainment and classification as serious. On November 15, 1990, the date of enactment of the 1990 Clean Air Act Amendments, Imperial County was designated nonattainment and classified as moderate.²² On August 11, 2004, EPA reclassified the area as serious in compliance with a mandate

21 EPA's Air Quality System Preliminary Design Value Report (May 18, 2010) shows 17 exceedances of the 24-hour PM₁₀ NAAQS in Imperial County between 2007 and 2009.

22 56 FR 56694 (November 6, 1991).

of the U.S. Court of Appeals for the Ninth Circuit.²³ The reclassification, pursuant to CAA section 188(b)(2), was based on a finding that the area failed to attain the PM₁₀ NAAQS by the statutory deadline of December 31, 1994. Once reclassified to serious, the area was required to comply with CAA section 189(b)(1)(B), which required that BACM be implemented for the area four years after its reclassification to serious.

The three exceedances to which OWD refers occurred during 2006 and 2007. The State requested that these exceedances be excluded from use in regulatory actions pursuant to EPA's EER.²⁴ Because we did not concur with the State's request, BACM is required to be implemented for certain windblown dust source categories, including open areas, for which such controls would not have been required if we had agreed with the State.²⁵ See our responses to Exceptional Events comments below.

We also note that California has chosen to sample PM₁₀ in Imperial County only one out of every six days. As a result, by regulation, each monitored exceedance is estimated to represent approximately six exceedances rather than one.²⁶ For example, in 2009, ICAPCD reported three monitored exceedances at the Ethel Street monitoring site, which are estimated to represent 18.3

23 69 FR 48792; *Sierra Club v. United States Environmental Protection Agency, et al.*, 346 F.3d 995 (9th Cir. 2003); *cert. denied*, 542 U.S. 919 (2004).

24 See section II.D.1 below.

25 75 FR 8008, 8010 and proposal TSD pp. 5-7.

exceedances. Exceedances were also monitored at Brawley, El Centro, Westmorland and Niland in 2009.²⁷

SIP #5: Comite believes PM₁₀ should be further controlled in Imperial County by adoption of local fugitive dust ordinances like those in Coachella's Cathedral City, and by strengthening open burning regulations to be similar to those in the South Coast Air Quality Management District (SCAQMD) and the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD).

Response: We assume the commenter refers to title 8, chapter 8.54 of Cathedral City's municipal code which describes requirements for construction, unpaved roads and other local dust sources.²⁸ These requirements are generally similar to the type of controls adopted by SCAQMD (e.g., Rule 403), SJVUAPCD (e.g., Regulation VIII) and ICAPCD (Regulation VIII). The commenter does not identify any specific Cathedral City controls that it believes are needed in ICAPCD Regulation VIII to constitute BACM. Except where identified in our proposal, we believe ICAPCD's BACM analyses include adequate evaluation of analogous fugitive dust controls in other areas.²⁹ It is possible that the commenter is recommending duplicative city ordinances that overlap County-wide Regulation VIII. While such redundancy could improve compliance,

26 40 CFR part 50, appendix K.

27 EPA's Air Quality System Preliminary Design Value Report (May 18, 2010).

28 Cathedral City Municipal Code, title 8, chapter 8.54, Fugitive Dust Control; <http://qcode.us/codes/cathedralcity/>.

it is generally not necessary to meet CAA section 110(a) enforceability requirements.

Finally, our proposed action only addresses the ICAPCD controls for certain PM₁₀ source categories encompassed by Regulation VIII, and therefore does not address control of open burning or many other air pollution sources in Imperial County. See also responses to comments SIP #1 and EI #1.

SIP #6: Comite cites *Vigil v. Leavitt*, 381 F.3d 826, 834 (9th Cir. 2004) and *Hall v. EPA*, 273 F.3d 1146 (9th Cir. 2001), in commenting that measures in other areas can be considered BACM for Imperial County and are per se feasible. Comite further argues that what constitutes BACM can strengthen over time. In contrast, OWD does not believe that Imperial County should apply mitigation measures from other geographic areas (e.g., SJVUAPCD and Maricopa) that have different geologic and other local conditions. Similarly, COLAB believes that different cultural practices prevent ICAPCD from blindly implementing controls imposed in other areas, although the ICAPCD and SJVUAPCD CMP rules are very similar. Still another commenter (0119) claims that similar restrictions on construction, OHVs, farmers, etc., in Las Vegas and elsewhere have not been effective, and there is no need for such draconian and ineffective bureaucratic rules.

Response: EPA believes that it is appropriate, when

evaluating what constitutes BACM for a given source category, to consider controls that have been adopted and implemented in other geographical areas. EPA agrees that the facts and circumstances in a given area can affect what constitute BACM for that area, but that this determination must be based upon appropriate consideration of relevant information specific to that area.

Comite does not explain how the cited cases support its position. Nonetheless, we agree that in evaluating BACM for Imperial County, ICAPCD should analyze analogous measures in other areas and that BACM may strengthen over time.³⁰ Our proposal identifies several significant deficiencies in ICAPCD's analysis to date.³¹ While BACM is determined on a case-by-case basis³² and, as such, the analysis can include evaluation of local conditions that might make specific controls economically and/or technologically feasible in one area but not another,³³ neither the 2009 PM₁₀ SIP³⁴ nor the comment provides sufficient detail to adequately address the deficiencies identified in our proposal.

30 General Preamble Addendum at 42013-42014.

31 E.g., OHV controls in Arizona Revised Statute §49-457.03 and Clark County Air Quality Regulations, section 90 (75 FR 8011, February 23, 2010).

32 General Preamble Addendum at 42010 and 42012.

33 In this respect, we do not agree with Comite that measures adopted in other areas are automatically transferable to Imperial County.

34 "2009 Imperial County State Implementation Plan for Particulate Matter Less Than 10 Microns in Aerodynamic Diameter,

OWD does not explain how Imperial County differs so markedly from the San Joaquin Valley and the Maricopa area that it would be inappropriate to consider BACM approved in those areas as part of the evaluation of controls for the same source categories in Imperial County. Similarly, COLAB does not elaborate on what "cultural practices" in Imperial County would justify disregarding approved BACM in the San Joaquin Valley and the Maricopa area as part of the evaluation of what controls would be appropriate for comparable source categories in Imperial County.

C. Emissions Inventory (EI)

EI #1: Many commenters oppose further OHV controls because they believe OHVs contribute little to Imperial County's PM₁₀ pollution problem compared to other sources. Commenters identify various sources they believe are more significant and/or should be further addressed instead, including fallow fields, fireplaces, feed lots, agricultural burning, pesticides, dirt roads, inefficient street lights, insufficient public transportation, insufficient speed limit enforcement, Interstate 8, the New River, the Salton Sea, Arizona to the east, San Diego to the west, Mexican roads, fires and factories to the south, rain, wind, erosion, dust storms and other natural occurrences. These commenters include OWD, 0096, 0097, 0150, 0139, 0152, 0180, 0192, 0194 and 0219.1.

Response: Our proposal explains that BACM is required for all significant PM₁₀ source categories in Imperial County, that windblown dust from open areas is a significant PM₁₀ source category, and that OHVs greatly increase emissions from open areas in Imperial County.³⁵ Our proposal further explains that ICAPCD has not demonstrated implementation of BACM for open areas with respect to OHVs.³⁶ These conclusions are based on inventory information prepared by ICAPCD and ARB and used during development of Regulation VIII and the 2009 PM₁₀ SIP.³⁷

The inventory in the 2009 PM₁₀ SIP represents the most comprehensive information currently available on OHV emissions in Imperial County.³⁸ ICAPCD's analysis in the 2009 PM₁₀ SIP concluded that windblown dust from open areas was not a significant source category, but this conclusion was premised upon many exceedences of the NAAQS being deemed to be the result of exceptional events. However, EPA's own conclusion regarding those exceedences is that they were not caused by exceptional events and, as a result, we consider windblown dust from open areas to be a significant source category that is subject to the CAA's BACM requirement. See response to comment SIP #4 and responses to Exceptional Events comments in section II.D below.

(2009 PM₁₀ SIP).

³⁵ Proposal TSD, pp. 5-8.

³⁶ *Id.* at p. 8.

³⁷ *Id.* at pp. 5-8.

³⁸ 2009 PM₁₀ SIP, Chapter 3; Appendix III.

Therefore ICAPCD has failed to meet the BACM requirement for windblown dust from open areas, in part because ICAPCD has not evaluated what controls might be appropriate for OHV activities in such areas.

EPA's action on the Regulation VIII submittal does not address or depend on whether additional controls may also be appropriate for the various other sources identified in the comments.

EI #2: One commenter (0188) had driven past many farms in El Centro during tilling and observes that the dust was very minimal. Another (0201) thinks more attention should be paid to agriculture which the commenter believes is exempt from many of the environmental regulations.

Response: See response to comment EI #1. Similar to emissions from open areas, EPA has concluded that emissions associated with tilling on and windblown dust from agricultural lands are significant source categories in Imperial County and, as such, ICAPCD needs to meet the BACM requirement for such sources.³⁹

The commenter (0201) concerned about exemptions for agriculture did not specify which regulations exempt agriculture. As explained in our proposal, however, because certain agricultural-related activities constitute a significant source

³⁹ Proposal TSD, pp. 5-8 and 9-11.

category for PM₁₀ in Imperial County, ICAPCD is required to meet the CAA's BACM requirements for such sources. Any "exemptions" for any such sources would need to be justified and explained in the context of meeting the BACM requirements.

EI #3: Several commenters claim that EPA has not proved the impact of OHVs on PM₁₀ levels sufficient to require additional OHV regulations. OWD notes, for example, that: (1) EPA did not analyze extreme terrain, thermal stability and other effects on winds in the desert; (2) most emissions from open lands come from undisturbed shrub/grassland which are not anthropogenic sources; and (3) ICAPCD's 2009 PM₁₀ SIP, on which EPA relies, uses worst-case assumptions rather than actual soil condition information to estimate that OHVs represent less than 5% of the County's total PM₁₀ emissions (13.9 of 282 tpd). OWD states that 99% of these total emissions relate to OHVs subject to federal and State stewardship. Therefore OWD concludes that actual OHV emissions are small compared to worst-case estimates. OWD also questions EPA's reference for the estimate of 22 tpd of windblown PM₁₀ from OHVs.

EcoLogic believes that EPA needs monitoring in the Ocotillo Wells State Vehicle Recreation Area (SVRA) and other areas to show how specific OHV activity affects sensitive receptors and for EPA to identify OHV activity as a major contributor to the County's PM₁₀ problem. Another commenter believes EPA lacks data

tying PM to specific OHV activities (0218.1), and several commenters believe that any pollution from OHVs is virtually immeasurable. Several commenters believe additional inventory analysis is particularly important because OHV areas are far from population centers and monitors with PM₁₀ exceedances. One commenter (0131) requests an unbiased third-party study of OHV impacts. CDD explains that PM₁₀ emissions from several specific parks in Imperial County should be low, partly because OHV activity is prohibited. In contrast, CBD supports EPA's claim that OHVs on BLM land cause considerable PM₁₀ in Imperial County, and notes that BLM previously estimated PM₁₀ impacts from OHV activities at the Aldodones Dunes alone as high as 11 tpd on holiday weekends.

Response: It is extremely difficult to quantify and speciate accurately the myriad sources of PM₁₀ emissions and PM₁₀ precursor emissions spatially and temporally for purposes of modeling air pollution impacts and developing cost effective control programs.

As a result, emission inventories are constantly being refined as more and better science and data become available. However, EPA, State and local air pollution agencies must make policy and regulatory decisions based on the best information available to comply with the CAA. As discussed in response to comment EI #1, the inventory and other information underlying our proposal regarding the emissions from OHV activity and the impacts of such

activity represent the most comprehensive information currently available.

Regarding specific concerns in this comment:

(1) EPA's conclusion that BACM is required for OHV activity relies on emissions inventory estimates that ICAPCD developed. If appropriate, ICAPCD could choose to refine those estimates to take into consideration factors such as terrain, thermal stability and other effects on winds in the desert, as well as distances between OHV areas and population centers and additional third party analysis. Such refinements are beyond the level of detail normally used in inventories required by CAA section 172(c) (3).⁴⁰

(2) ICAPCD in its 2009 PM₁₀ SIP quantifies the impact of soil type and land cover (e.g., shrub/grassland) and degree of OHV disturbance in OHV emission estimates relied on by our proposal.⁴¹

(3) ICAPCD used the best available information regarding soil types in open areas and determined that the remaining uncertainty does not affect the results of the technical

40 See, e.g., AP-42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.2 - Unpaved Roads, Final Section, EPA, November 2006. This document provides EPA guidance on estimating emissions on unpaved roads and does not, for example, account for road terrain.

<http://www.epa.gov/ttn/chief/ap42/ch13/index.html>.

41 2009 PM₁₀ SIP, appendix III.B.

analyses.⁴²

(4) Even OWD's 13.9 tpd OHV emission estimate, which we believe is too low,⁴³ exceeds the presumptive 5 $\mu\text{g}/\text{m}^3$ de minimis level for source categories requiring BACM.⁴⁴

(5) The reference for 22 tpd of windblown OHV emissions is accurately explained in our proposal.⁴⁵

The comment that monitoring is necessary in the Ocotillo Wells SVRA and other areas before EPA should require controls for OHV activities is incorrect. As stated previously, under CAA section 189(b) and EPA guidance, BACM is required for all significant source categories in the nonattainment area, including windblown dust in open areas caused by OHV activity.⁴⁶ Thus monitoring, which could provide valuable information, is nevertheless not necessary to determine which source categories require BACM.

D. Exceptional Events (EE)

1. Background

On March 22, 2007, EPA adopted a final rule to govern the review and handling of certain air quality monitoring data for

42 2009 PM₁₀ SIP, p. 3-2.

43 In comparison to ICAPCD's 22 tpd estimate. Proposal TSD, footnote 32.

44 As discussed on pp. 5-8 of the proposal TSD, depending on the specific monitor, 2-3% of Imperial County's annual inventory is calculated to result in a 5 $\mu\text{g}/\text{m}^3$ contribution, which equates to about 6-8 tpd emissions.

45 *Id.*

46 See, e.g., proposal TSD, p. 5.

which the normal planning and regulatory processes are not appropriate.⁴⁷ Under the rule, EPA may exclude data from use in determinations of NAAQS exceedances and violations if a state demonstrates that an "exceptional event" caused the exceedances. Before EPA can exclude data from these regulatory determinations, the state must flag the data in EPA's Air Quality System database and, after notice and opportunity for public comment, submit a demonstration to EPA to justify the exclusion. After considering the weight of evidence provided in the demonstration, EPA decides whether or not to concur with each flag.

On May 21, 2009, ARB submitted demonstrations for "high wind" events that allegedly caused ten exceedances of the 24-hour PM₁₀ standard at various monitors in Imperial County in 2006 and 2007. The demonstrations consisted of the following support documents (listed in Table 2) prepared by ARB, ICAPCD, and ICAPCD's contractor, ENVIRON:

Table 2

Description	Document	Abbreviated
	Date	Title
Natural Event Documentation: Calexico and Westmorland, California - September	January 30, 2009	September NED ⁴⁸

47 "Treatment of Data Influenced by Exceptional Events," 72 FR 13560 (March 22, 2007) (EER).

48 We refer to the natural event documentation in these five documents, collectively, as the NEDs.

2, 2006		
Natural Event Documentation: Brawley and Westmorland, California - April 12, 2007 [enclosed with June 13, 2008 letter to Sean Hogan]	April 15, 2008	Original April NED
Natural Event Documentation: Brawley, Calexico, El Centro, Niland, and Westmorland, California - June 5, 2007, Imperial County Air Pollution Control District [enclosed with June 13, 2008 letter to Sean Hogan]	April 15, 2008	Original June NED
Natural Event Documentation: Brawley and Westmorland, California - April 12, 2007 [addendum to June 13, 2008 submittal]	March 12, 2009	April NED
Natural Event Documentation: Imperial County, California - June 5, 2007 [addendum to June 13, 2008 submittal]	March 12, 2009	June NED

As stated above in section I, on December 22, 2009, EPA denied ARB's request to exclude all of the exceedances as exceptional events. The basis for our decision is specified in

an enclosure which accompanied the December 22, 2009 letter.⁴⁹ By letter, including Attachment A and Appendix A1, dated March 3, 2010, ICAPCD asked EPA to reconsider this decision.⁵⁰

Our proposal on Regulation VIII explained that our 2009 EE decision led to an adjustment of ICAPCD's significant source analysis which in turn led us to modify the list of significant sources for which BACM must be implemented in Imperial County under CAA section 189(b)(1)(B).⁵¹ As a result, our 2009 EE decision was the subject of public comments on our proposed action. ICAPCD resubmitted its March 3, 2010 letter, including Attachment A and Appendix A1, regarding our 2009 EE decision as Appendix C to its March 25, 2010 comment letter on our Regulation VIII proposed action.⁵² EPA also received comments pertaining to our exceptional events decision from Comite and CBD. A summary of these comments and our responses follow.

2. Events Not Reasonably Controllable or Preventable

EE #1: ICAPCD (Attachment) disagrees with EPA's interpretation of the requirement in the EER at 40 CFR 50.1(j) that in order for an event to meet the regulatory definition of

49 See footnote 2. We refer to our December 22, 2009 letter and the enclosure hereafter as "2009 EE decision."

50 Letter from Brad Poiriez (ICAPCD) to Jared Blumenfeld (EPA), March 3, 2010 with Attachment A and Appendix A1.

51 See 75 FR 8010 and the proposal TSD, pp. 5-7.

52 We refer to ICAPCD's March 10, 2010 letter with its Attachment A and Appendix A1, collectively, throughout our responses to the exceptional events comments in section II.D as "Attachment."

exceptional event, such event must be "not reasonably controllable or preventable." Specifically ICAPCD takes issue with EPA's statement in our 2009 EE decision that this criterion inherently implies "a requirement that the state demonstrate that anthropogenic sources contributing to the exceedance caused by the event were reasonably well controlled." ICAPCD believes that under the plain regulatory language it is irrelevant whether "reasonable and appropriate" controls are in place on the day of an otherwise qualifying event when it can be shown that such controls would not reduce emissions and impact at the monitor sufficiently to prevent the exceedance. ICAPCD believes that it is inconsistent with the intent of the CAA for EPA to refuse to concur with an exceptional event claim solely due to EPA's dissatisfaction with the stringency of certain controls when such controls could not have prevented the exceedance.

Response: ICAPCD mischaracterizes both the plain language and the regulatory intent of 40 CFR 50.1(j) by reading the words "reasonably controllable or" out of that section. The regulation clearly requires a showing that the event is not either reasonably controllable or preventable, not as ICAPCD would have it, that the event cannot be controlled to the extent that no exceedance would have occurred. Furthermore, "control" as generally used in the CAA and EPA guidance (e.g., RACT and

BACM⁵³), and as defined in the dictionary means to regulate or to reduce the incidence or severity.⁵⁴ Thus the meaning of the word "control" undeniably differs from the words "eliminate" or "prevent." Therefore, to meet the "not reasonably controllable or preventable" criterion in 40 CFR 50.1(j), states must demonstrate that reasonable controls were implemented to regulate or reduce emissions *regardless* of whether the controls would have prevented exceedances.⁵⁵ Finally we note that the relevance of dust controls is inherent in the District's own characterization of the "event" as the combination of wind and dust entrainment from anthropogenic and nonanthropogenic sources.⁵⁶

As discussed in our 2009 EE decision, the State failed to demonstrate that reasonable controls were implemented for anthropogenic sources contributing to the exceedances, including recreational OHVs and fallow agricultural fields.⁵⁷ Nor does ARB or ICAPCD provide convincing evidence in the NEDs or elsewhere to

53 "BACM is the maximum degree of emissions reduction of PM₁₀ and PM-10 precursors from a source... which is determined on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, to be achievable for such source through application of production processes and available methods, systems, and techniques for control of each such pollutant." General Preamble Addendum at 42010.

54 Merriam-Webster's Ninth New Collegiate Dictionary.

55 Similarly, EPA explained in the preamble to the EER that analysis of exceptional events includes consideration of whether anthropogenic activities have been controlled to the extent possible through use of all reasonably available reasonable and appropriate measures. 72 FR 13560, 13566, footnote 11.

56 E.g., September NED, p. 9.

57 2009 EE decision, section 4.2.

support the claim that controls on these sources could not have either prevented the exceedances or reduced emissions.

EE #2: ICAPCD (Attachment) further argues that the consequence of EPA's action would be to require control measures beyond the area's practical abilities - a result the EER is specifically designed to avoid. ICAPCD claims that other specific provisions are in place to prevent such difficulties, and ICAPCD quotes from EPA guidance: "if emissions from anthropogenic sources are reduced to the point that it is no longer technologically or economically feasible to reduce those emissions further, and the area still cannot attain the NAAQS, the EPA may consider waiving the serious area attainment date and appropriate serious area requirements."⁵⁸

Response: The provisions to which ICAPCD refers are contained in CAA section 188(f) which authorizes EPA to waive subpart 4 requirements applicable to serious PM₁₀ nonattainment areas, including BACM, where EPA determines that anthropogenic sources of PM₁₀ do not contribute significantly to the violation of the standard in the area. Under section 188(f), EPA may also waive a specific date for attainment of the PM₁₀ standard if the Administrator determines that nonanthropogenic sources contribute significantly to a violation of the standard.

In guidance, EPA has established the same test for

⁵⁸ General Preamble Addendum at 42008.

determining what constitutes a significant contribution for section 188(f) as is used for determining the sources for which BACM must be implemented under CAA section 189(b) (1) (B).⁵⁹ The passage in the guidance, quoted in isolation by ICAPCD, is preceded by a lengthy discussion regarding the circumstances under which a serious area such as Imperial County could qualify for section 188(f) waivers. That discussion makes clear that before EPA will consider waiving a serious area attainment date and requirements for a serious area that failed to attain the standard by the serious area deadline, the state must demonstrate that BACMs for significant anthropogenic sources have been implemented and that the area cannot attain the NAAQS with the implementation of additional control measures to achieve at least 5% annual emission reductions pursuant to CAA section 189(d). As discussed above and in the proposal,⁶⁰ ICAPCD has not shown that BACM has been implemented as required by CAA section 189(b) (1) (B) for all significant source categories in Imperial County.⁶¹ Thus

59 *Id.* at 42004.

60 75 FR 8008, 8010-8012 and proposal TSD, pp. 7-11.

61 The 2009 PM₁₀ SIP for Imperial County that is intended to address the 5% requirement in CAA section 189(d) was adopted by ICAPCD in August 2009 but has not been submitted to EPA by ARB. The plan concludes that the area would have attained the PM₁₀ standard by the end of 2008 but for transported emissions from Mexico and with the "exclusion of PM₁₀ measurements affected by high-wind exceptional events." As a result of the claimed exceptional events, with which we did not concur in our 2009 EE decision, the plan also concludes that "[t]he 5% yearly emission reductions requirement does not apply to future years." 2009 PM₁₀ SIP, section 5.3.

it would be difficult to show that additional controls are "beyond the area's practical abilities" or "no longer technologically or economically feasible" without a more thorough BACM analysis.

EE #3: ICAPCD (Attachment) believes, citing the preamble to the EER, that the rule only requires reasonable controls for anthropogenic sources within the state.

Response: While Imperial County air quality may be affected by emission sources from areas outside California, such as Arizona and Mexico, our 2009 EE decision relies on the lack of demonstrated controls for anthropogenic sources within California.

EE #4: ICAPCD (Attachment) believes that EPA has not specified criteria for defining de minimis anthropogenic sources in the EER context, explained how the EER justifies such criteria, or described feasible analyses to implement such criteria.

Response: As noted above, our 2009 EE decision stated that inherent in the "not reasonably controllable or preventable" criterion of the definition of "exceptional event" in 40 CFR 50.1(j) "is a requirement that the state demonstrate that anthropogenic sources contributing to the exceedance caused by the event were reasonably controlled." We also suggested that this requirement be limited to "all non-de minimis anthropogenic

sources.”⁶² In this case, however, rather than further interpreting the EER, we relied on statements in the NEDs acknowledging anthropogenic contributions in order to determine which anthropogenic sources were contributing to the 2006 and 2007 exceedances.⁶³

EE #5: ICAPCD (Attachment) opposes the statement in EPA’s 2009 EE decision that “because implementation of BACM is required in serious PM₁₀ areas such as Imperial County under section 189(b) of the CAA, it is appropriate to consider that level of control in evaluating whether reasonable controls are in place for purposes of the Exceptional Events Rule.” Specifically, ICAPCD argues that (1) such a standard would create a new standard for exceptional event showings that is inconsistent with the language and intent of the EER which entails only “reasonable” and not “best” control of anthropogenic sources; (2) the purpose of the EER is to protect states from consequences of reclassification as a result of exceptional events; (3) by definition, exceptional events fall outside the normal planning process and their analysis should not depend on elements of the normal planning process including designation status; and (4) the meaning of “reasonable controls” for the EER should not vary by an area’s nonattainment status and should not be as stringent as BACM.

⁶² 2009 EE decision, section 4.2

Response: As stated in our 2009 EE decision and in the preamble to the EER, EPA addresses the EER criteria, including that the event must be “not reasonably controllable or preventable,” on a case-by-case basis considering the weight of available evidence.⁶⁴ Thus it is appropriate to consider the totality of circumstances in Imperial County in determining what constitutes “reasonable” controls. We note again that the County has been designated nonattainment and classified as moderate or serious since 1990. The area was reclassified to serious in 2004.

In evaluating rules as RACM or BACM, EPA has long considered it appropriate to consider local conditions since what is technologically and economically feasible in one area may not be in another.⁶⁵ Moreover, EPA’s 2009 EE decision did not define reasonable control as BACM in all cases or suggest that the EER mandates such an outcome. Rather, we stated that “[b]ecause implementation of BACM is required in serious PM₁₀ nonattainment areas such as Imperial County under CAA section 189(b), it is appropriate to consider that level of control in evaluating whether reasonable controls are in place for purposes of the Exceptional Events Rule.”^{66,67} While ICAPCD states that this is

63 See *id.*, section 4.2.1.

64 2009 EE decision, pp. 4 and 7; 72 FR 13560, 13569.

65 See 57 FR 13498, 13540-13541 (April 16, 1992) and the General Preamble Addendum at 42010.

66 2009 EE decision, section 4.2.2; 72 FR 70222.

67 We note that in EPA’s Natural Events Policy which applied prior to the EER, we stated that “BACM must be implemented at

inappropriate reliance on the normal planning process, an area's nonattainment designation and classification are inherently part of the local conditions that are appropriately factored into what controls are reasonable for purposes of the EER. We also noted that ARB had failed to demonstrate any meaningful analysis of BACM or any other level of control for either OHVs or fallow fields, despite apparent significant emissions and available controls imposed elsewhere.⁶⁸

EE #6: ICAPCD (Attachment) comments that OHV emissions were quantified in the 2009 PM₁₀ SIP at EPA's request, but EPA ignored this information in its analysis of the exceptional event requests.

Response: It is the responsibility of the State to submit demonstrations addressing the EER criteria⁶⁹ to support its exceptional event requests and it is generally not appropriate or feasible for us to correct NED deficiencies by searching for additional information. Nonetheless, we did review the 2009 PM₁₀ SIP before preparing the 2009 EE decision and did not ignore

contributing anthropogenic sources of dust in order for PM-10 NAAQS exceedances to be treated as due to uncontrollable natural events under this policy." This requirement applied to moderate areas which otherwise would not have been required to implement BACM at all as well as to serious areas. Thus, while the EER does not include such a mandate, it is entirely appropriate and consistent with the Agency's past practice to *consider* a BACM level of control in assessing whether reasonable controls are in place. Memorandum from Mary D. Nichols, EPA, "Areas Affected by PM-10 Natural Events," May 30, 1996, p. 5.

68 2009 EE decision, pp. 9-10.

ICAPCD's efforts to quantify OHV emissions in the 2009 PM₁₀ SIP. In fact, the 2009 EE decision references these efforts which undermine the assumption in the NEDs⁷⁰ that windblown dust from desert areas is entirely from non-anthropogenic sources.⁷¹

EE #7: ICAPCD (Attachment) believes it is not clear whether OHV sources should be considered de minimis, what controls EPA expects for illegal OHV use, and why current regulations do not constitute reasonable controls.

Response: As stated previously, the state must demonstrate implementation of reasonable controls in documentation supporting exceptional events requests. It is possible that ICAPCD/ARB may be able to demonstrate in support of future exceptional events requests that OHV sources are de minimis, that there are no reasonable controls for OHVs under certain circumstances (e.g., certain illegal uses), and/or that existing regulations constitute reasonable controls. The 2009 EE decision, however, explains that the NEDs did not provide meaningful analysis of any level of control for OHVs, and that such analysis should include as a starting point evaluation of EPA's RACM guidance⁷² and regulations adopted elsewhere under similar conditions.⁷³

EE #8: ICAPCD (Attachment) comments that sand dunes are

69 40 CFR 50.14(c)(3).

70 E.g., June NED, p. 2.

71 E.g., 2009 EE decision, footnotes 12, 15 and 16.

72 57 FR 18070, 18072 (April 28, 1992).

73 2009 EE decision, pp. 8-9.

naturally fully disturbed and that the 2009 PM₁₀ SIP conservatively projects that OHVs contribute only 0.9 tpd (10%) to the total windblown emissions from them. Other commenters similarly question EPA's assumption that OHVs disturb desert crust. OWD, for example, notes that dune laminae are often mistaken for a crust but are broken by wildlife, foot traffic and high winds.

Response: We agree that effective control of fugitive dust is more difficult for the sand dunes than for other parts of Imperial County with different soil types. As a result, the State may be able to demonstrate in support of future exceptional events requests, or for other CAA purposes such as section 189(b)(1)(B) BACM, that dust control for dunes should be different from and/or less stringent than controls required for other areas with different soil types. However, the September NED failed to provide meaningful analysis of reasonable OHV controls for the sand dunes or any other areas. This comment has no bearing on the April and June NEDs because the sand dunes were not implicated by those events.

EE #9: ICAPCD (Attachment) comments that OHV activity and related direct PM₁₀ entrainment should have been negligible because of the high winds during the April 12 and June 5, 2007 events and thunderstorms on September 2, 2006. OWD notes that two of the exceedance events occurred during the OHV off-season

and the third occurred in April, when OHV use is also low. Similarly, BLM comments that OHV use is lowest when dust potential is highest (June through September).

Response: Our 2009 EE decision appropriately relies on OHV emission information from the NEDs and the 2009 PM₁₀ SIP which estimate large windblown dust emissions and significantly smaller directly entrained emissions.⁷⁴ Thus, even if no OHVs operate and entrain dust on any exceedance days, previous⁷⁵ OHV activity still contributes to PM₁₀ emissions by disturbing surfaces that subsequently emit windblown dust. As a result, documentation supporting future Imperial County exceptional events requests for events with significant emissions from OHV areas should include analysis of reasonable controls for OHVs even if there is no OHV activity during the exceedances.

EE #10: ICAPCD (Attachment) comments that Regulation VIII agricultural controls are well beyond the reasonableness level required in the EER. ICAPCD further states that it and ARB have discussed agricultural controls with EPA for many years, worked with EPA during development of the 2005 BACM analysis, closely modeled Rule 806 on SJVUAPCD Rule 4550 which EPA approved in 2004, and received EPA testimony in 2005 that Regulation VIII, including Rule 806, fulfilled BACM. ICAPCD also points out that

⁷⁴ E.g., 22 tpd windblown and 1.34 tpd entrained emissions, 2009 EE decision, p. 9.

the emission inventory in the plan shows that agricultural lands are significantly less emissive than most of the non-populated areas in Imperial County.

Response: Our 2009 EE decision explains that neither Regulation VIII nor any other programs require any level of emissions control of certain fallow fields in Imperial County.⁷⁶ Though ICAPCD comments that emissions from agricultural fields are smaller than emissions from other sources in the County, the NEDs for the exceptional events requests do not identify any anthropogenic sources as being de minimis. Rather, there are summary explanations that anthropogenic sources are reasonably controlled through Regulation VIII and other local programs.⁷⁷ The only anthropogenic source discussed in any detail is agriculture in the April and June NEDs. These NEDs rely on the Imperial Irrigation District's (IID) fallowing program as the basis for claiming that reasonable measures were in place for fallow fields which are not subject to ICAPCD's Conservation Management Practices (CMP) Rule 806.⁷⁸ However, there were approximately 32,000 fallow acres in Imperial County in 2007 that were not subject to either Rule 806 or IID's program which is more than the approximately 18,000 acres that were a part of

75 Particularly recent activity where there has not been time or conditions to repair surface crusts.

76 2009 EE decision, section 4.2.3.

77 April and June NEDs, pp. 13-14, and September NED, p. 18.

78 April and June NEDs, p. 13.

IID's program in 2007.⁷⁹ As explained in our response to comment EE #5, we stated in our 2009 EE decision that it is appropriate to consider a BACM level of control in evaluating whether reasonable controls are in place for purposes of the EER in Imperial County. However, EPA found no meaningful analysis of BACM or any other level of control for fallow land outside of IID's program referenced or provided in the NEDs.

EE #11: ICAPCD (Attachment) comments that EPA's 2009 EE decision fails to mention Rule 806 in the discussion of controls for agricultural lands. ICAPCD notes that fallowed land issues were included in the 2005 BACM analysis⁸⁰ and concludes that failure to address Rule 806 makes EPA's conclusions regarding agricultural areas suspect.

Response: EPA did consider and reference Rule 806 in our 2009 EE decision.⁸¹ Although the 2005 BACM analysis includes incidental references to fallow lands, neither it nor the NEDs attempts to quantify the fallow acreage in Imperial County. Nor has the State demonstrated how any existing windblown dust controls might constitute BACM for fallow fields outside of IID's program.

3. High/Unusual Wind Events

EE #12: Comite agrees with EPA's disapproval of ARB's

⁷⁹ 2009 EE decision, p. 9.

⁸⁰ "Draft Final Technical memorandum: Regulation VIII BACM Analysis," October 2005 (2005 BACM Analysis).

request to exclude the monitored exceedances as exceptional events. In support of our disapproval the commenter makes several arguments: 1) that there is no statutory or regulatory authority which allows windblown dust from land that has been disturbed by human activity to be considered "natural;" 2) that while the final rule includes specific language regarding the treatment of anthropogenic emissions associated with fireworks and prescribed burns, it does not include special provisions for anthropogenic sources affected by the wind; 3) that the portion of the preamble which suggests dust from anthropogenic sources may be treated as natural events in certain circumstances was a drafting error and is legally null; 4) where the Act does allow for consideration of human activity, it is limited to activity that is unlikely to recur at a particular location and agriculture does not meet that definition; and 5) regardless of whether a high wind event is classified as "natural" or "human activity," such an event exists only where the wind is objectively a "high wind" and sufficiently high to cause a monitored violation even in light of the implementation of whatever measures are "necessary" to protect public health under CAA section 319(b)(3)(A)(iv).

Response: Comite's support for our decision not to concur with the State's exceptional events claims is noted. We agree

with Comite that the events in question are not due to human activity that is unlikely to recur and that the State failed to demonstrate that the events qualify as natural events. However our conclusions with respect to natural events are not based on all of the legal arguments proffered by the commenter. We also are not relying on that portion of the preamble that the commenter correctly points out is a legal nullity⁸² and instead, where appropriate, we rely on and cite to other parts of the preamble regarding natural events and high winds that remain applicable. While EPA's views of the statute and the EER differ from Comite's, we need not address Comite's arguments in detail because its intent was clearly to support the outcome we have reached regarding the exceptional events claims.

EE #13: Comite cites additional support for nonconcurrence with the State's 2007 exceptional events requests beyond what was relied upon by EPA, namely that wind speeds were not shown to be "exceptional" for the area or "unusual" since the State relied on flawed comparisons to average wind speeds.

Response: For the 2006 events, the State did not assert that the winds were unusually high. For both sets of 2007 events, the evidence provided by the State did lead EPA to conclude that winds were unusually high.⁸³ However, EPA's 2009 EE decision did

82 *NRDC v. EPA*, 559 F.3d 561, 565 (D.C. Cir. 2009)

83 2009 EE decision, pp. 19-20.

not rely on the State's conclusions about unusual winds for any of the exceedances and we note that this commenter does not disagree with EPA's conclusions on the exceptional events, or with EPA's proposed limited disapproval of Regulation VIII.

4. Clear Causal Relationship

EE #14: Comite agrees with EPA that the State did not demonstrate there was a clear causal relationship between the exceedances and the events that are claimed to have occurred, as required under the EER. With regard to the 2007 exceedances, the commenter cites the lack of sufficiently detailed source attribution data. With regard to the 2006 exceedances, the commenter concludes that the proximity and nature of the thunderstorms that occurred in northwest Mexico made them "unlikely" to be the cause of the winds at Calexico. This commenter also believes that the possibility of any winds associated with thunderstorm activity north of the County being the cause of the Westmorland exceedance is "problematical at best."

Response: Comite's agreement with EPA's 2009 EE decision regarding the 2006 and 2007 exceedances is noted.

EE #15: ICAPCD (Attachment) objects to EPA's analysis of a section of the ARB documentation that compares September 2, 2006 to other days with similar meteorological conditions in order to establish a causal relationship between the claimed high wind

event and the Calexico exceedances on September 2, 2006. ICAPCD also rejects EPA's concerns regarding the effect of emissions from OHVs and fallow fields on the September 2, 2006 Calexico exceedances. ICAPCD concludes that EPA's lack of sound technical understanding regarding the meteorological evidence and OHV and agricultural emissions led EPA to erroneously reject the State's finding of a "clear causal relationship" for the September 2, 2006 Calexico exceedances.

Response: In its documentation supporting its exceptional events request, the State compared PM₁₀ concentrations on September 2, 2006 to those on fifteen other days that had similar meteorology at Calexico.⁸⁴ The PM₁₀ concentrations on most of the days were low, but on August 18, 2002, August 19, 2003 and September 2, 2006 the PM₁₀ concentrations were high. The concentrations on these days in 2002 and 2003 are described in attachments to the State's Natural Events Documentation⁸⁵ as being due to transport from Mexico under high wind conditions, and these conditions are stated to be meteorologically different than the other days at locations other than Calexico itself. Thus winds at Calexico were similar for all sixteen days, but on

84 September NED, pp. 12-14.

85 September NED, p. 12, and Attachment G, "179B(d) 'But For' Analyses - High-Wind Events from Mexico", excerpt from Technical Support Document: Exclusion of PM₁₀ Measurements in Excess of the 24-Hour PM₁₀ NAAQS for Imperial County from 2001 through 2003 Due to Natural Events and Emissions from Mexico, Volume I of II, ENVIRON International Corporation, November 2004.

these specific days the wind elsewhere and the Calexico concentrations are higher. The State considered this to be evidence of an association or causal relationship between high wind elsewhere and high Calexico concentrations.

While we acknowledge that we misinterpreted the above portion of the State's argument in our initial analysis, our ultimate conclusion remains unchanged. As we discussed in our 2009 EE decision,⁸⁶ the State's argument is flawed because there were in fact no high wind measurements on September 2, 2006; instead, the State merely assumed that wind speeds increased to the east. As a result, the association between the winds and concentrations that was seen for the events in 2002 and 2003 may not reflect what occurred on September 2, 2006. Thus our original conclusion is still valid because the fact remains that ARB's argument is founded on speculation. As we explained in our 2009 EE decision,⁸⁷ such speculation is not adequate to establish a clear causal relationship.

Furthermore, as also discussed in our 2009 EE decision,⁸⁸ significantly lower PM₁₀ measurements in neighboring Mexicali contradict ARB's assertion that the September 2, 2006 Calexico exceedances were caused by windblown dust from a large-scale, regional event that originated to the south or southeast of

⁸⁶ 2009 EE decision, pp. 11 and 15.

⁸⁷ *Id.* at p. 11.

⁸⁸ *Id.* at p. 12.

Calexico. Such an event would have affected both Calexico and Mexicali. ICAPCD itself concedes that its explanation for the Calexico exceedances does not account for the difference in the PM₁₀ concentrations measured at the Calexico and Mexicali stations.⁸⁹

ICAPCD further offers what it characterizes as the only three possible explanations for the Calexico exceedances, and suggests that EPA should accept the long range transport argument because it is the most plausible one.⁹⁰ To do so would be to make a decision based on a predetermined outcome rather than reliable scientific data that establish a clear causal relationship as required by the EER.

ICAPCD's next objection to our analysis of ARB's exceptional event request with respect to the September 2, 2006 Calexico exceedances is that EPA's concern regarding OHV and agricultural emissions⁹¹ is not relevant because there are no OHV or domestic agricultural lands south, southeast or south-southeast of the Calexico monitors. EPA disagrees. The September NED states that the "source of the PM₁₀ that impacted the Calexico stations corresponds to lands east and southeast of the Mexicali stations..."⁹² In fact, as shown in the TSD for this final

89 ICAPCD Attachment A, Appendix A-1.

90 *Id.*

91 2009 EE decision, p. 14.

92 September NED, p. 15.

action,⁹³ there is agricultural land immediately east of Calexico.⁹⁴ As also shown in the final TSD,⁹⁵ the southern end of the Imperial Sand Dunes OHV area is also directly east of Calexico, though it is admittedly farther away. Thus consideration of these sources was not inappropriate.

In summary, we are not persuaded by the above comments and we reject the allegation that we did not have a sound technical understanding of the claims ARB made as to the cause of the exceedances. We therefore reaffirm our conclusion that ARB not only failed to demonstrate that a high wind event occurred, but also that there was a clear causal relationship between the alleged event and the September 2, 2006 exceedances at the Calexico monitoring stations.

EE #16: ICAPCD (Attachment) states that EPA mischaracterized some evidence and inappropriately dismissed other evidence provided by the State regarding a causal relationship between the claimed high wind event and the Westmorland exceedance on September 2, 2006, and that this led EPA to erroneously reject the State's finding of a clear causal relationship. The comment has three parts, relating to alleged EPA mischaracterizations of

93 "Technical Support Document for EPA's Notice of Final Rulemaking on Revisions to the California State Implementation Plan, Imperial County Air Pollution Control District Regulation VIII - Fugitive Dust Rules 800-806" EPA Region IX, June 2010 (final TSD), Figure 1.

94 Similar land use maps were provided in Figure 3 of both the April and June NEDs.

the timing of high winds, direction of thunderstorm travel, and wind trajectories.

Response: In response to this comment, we have again reviewed the wind data provided in the September NED and, as explained further below, we believe our original conclusion in our 2009 EE decision remains correct, i.e., that the data presented by ARB did not demonstrate a clear causal relationship between the claimed high wind event and the Westmorland exceedance on September 2, 2006.

The first part of ICAPCD's comment focuses on a statement made by EPA that the increased wind at Oasis toward Westmorland was simultaneous with the concentration spike that occurred at Westmorland during the 19th hour rather than an hour or two before, as would be necessary based on the distance between the two locations.⁹⁶ We agree with the comment that the increased wind at Oasis did in fact occur the hour before the concentration spike. In addition, we stated that this wind was directed toward Westmorland when in fact it was directed toward the east-northeast.

ARB presented the wind speed and direction data in a tabular format that is difficult to interpret.⁹⁷ To more clearly articulate why we do not believe these data show a clear causal

95 Final TSD, Figure 1.

96 2009 EE decision, p. 16.

97 September NED, Tables 1 and 2, and Figure 19.

relationship between the event and the exceedance, we have presented the data in the final TSD in a visual form that is more readily understood.⁹⁸ The arrows represent the wind directions at Indio, Oasis, Salton Sea West, and Westmorland during each of the four color-coded hours (e.g., all of the yellow arrows represent the wind direction during hour 17, etc.). The numbers above each arrow represent the wind speed for that hour, and the numbers below the Westmorland arrows represent the PM_{10} concentration. The data show that the PM_{10} concentration spike occurred during hour 19.

ARB claimed that thunderstorm outflows on September 2, 2006 led to high wind locally to the northwest and northeast of Imperial County, and that dust generated there was carried to Westmorland. More specifically, ARB stated the following:

Very high winds were observed at the 17th and 18th hours north of Imperial County, both to the west (in particular at the Oasis CIMIS station, see Table 1) and to the east (see measurements at the Blythe, Ripley, and Palo Verde stations, Table 1). These strong winds were of very short duration and of changing direction..., consistent with the collapse of one or several thunderstorm cells north of Imperial County...Very sharp peaks in PM_{10} concentrations were also observed at the 19th hour at the Brawley and Westmorland stations (and to a

⁹⁸ Final TSD, figure 2.

lesser extent at the Niland station), and appear to be long-range effects of the same events (i.e. collapsing thunderstorm to the north of Imperial County)...[A]n analysis of wind direction at select stations between the 18th and 20th hours indicates that *northwest winds* (e.g. 6 p.m. at the SSW and Indio stations, 7 p.m. at Oasis and Indio, and 8 p.m. at Indio) and east-northeast winds (e.g. 7 p.m. at the Niland and SSE stations) *likely carried air containing elevated PM₁₀ concentrations from areas northwest and northeast of Imperial County stations toward the stations.* (Emphasis added).⁹⁹

ARB's explanation first points to the "very high" winds (of 23.2 mph) recorded at the Oasis station and the northwest winds at Salton Sea West during the 18th hour as factors that contributed to the exceedance. As a preliminary matter, we note¹⁰⁰ that no particular wind speed has been established as "high" for Imperial County. Further, winds with an average speed of 23.2 mph are not what we would consider "very high" in the generally accepted meaning of the term. With the exception of this value, the data in Figure 2 of our final TSD show that the winds in this area were not very elevated.¹⁰¹ We also note that

99 September NED, pp. 10-11.

100 As we did in our 2009 EE decision, pp. 15 and 19.

101 EPA received comments on its proposed EER which stated that we should replace the term "high winds" with the term "wind-

the winds at Oasis during the 18th hour had a northerly component rather than a southerly one, and while it is true that the winds at Salton Sea West were blowing toward Westmorland at this time and that these winds could have contained some of the dust that may have been generated in the Oasis area, the winds at Westmorland were blowing in almost the opposite direction. It is thus unclear how much, if any, dust generated at Oasis during the 18th hour was actually transported to Westmorland.

ARB also points to the 7 pm winds at Oasis (hour 19) as a contributing factor. While these winds were directed toward Westmorland, the winds at Salton Sea West had a distinct westerly component so it is not clear that the winds at Oasis continued on this path past Salton Sea West. In addition, as for the previous hour, the winds at Westmorland were blowing counter to the wind at Oasis and it is again not clear that any dust generated north of Imperial County was transported to Westmorland during this hour as ARB claims.

The State finally points to the 8 pm winds at Indio as a contributing factor. We find it unlikely that these winds made a significant contribution to the exceedance at Westmorland given that they were recorded after the concentration spike occurred

generated dust.” In response to those comments, EPA explained in the final EER that the Agency chose to retain the original language because it accurately connotes the type of natural event that should be excluded under this rule and it serves as an

and that the winds at Oasis, Salton Sea West, and Westmorland all had northerly components that ran counter to the winds at Indio.

As stated in our 2009 EE decision,¹⁰² and as ARB stated in the paragraph quoted above, the winds northwest of Imperial County (particularly around the Oasis and Salton Sea West areas) were variable in speed and direction. This variability is inconsistent with ARB's hypothesis that the winds remained at an elevated speed and along a straight line over the 45 mile distance between Oasis and Westmorland for an hour or more. Thus it is anything but clear that dust generated northwest of Imperial County caused the exceedance at Westmorland. As a result, EPA's minor errors regarding the timing and direction of the winds at Oasis do not undermine the Agency's conclusion that the contradictory evidence does not support a finding of a clear causal relationship.

The second part of ICAPCD's comment on the causal relationship regarding the Westmorland exceedance argues that the speed and direction of the increased winds (27.0 mph) recorded at the Palo Verde station during hour 17 are consistent with transport to Westmorland and that the uncertainty of the precise location of the thunderstorms in time is not relevant to a cause and effect analysis. The commenter further states that EPA does

indicator concerning the level of wind that caused the exceedance. See 72 FR 13560, 13566.

102 2009 EE decision, p. 16.

not appear to argue that the wind speed or direction is inconsistent with transport of dust from Palo Verde to Westmorland.

While we agree with the commenter that the winds at Palo Verde (which is separated from Westmorland by a north-south distance of about 24 miles) were directed toward Westmorland during the 17th hour, the winds at Westmorland were consistently from the south-southeast, southeast, and east-southeast directions beginning at the 6th hour and lasting until the end of the day. While it is remotely possible that the winds that occurred at Palo Verde during the 17th hour led to the transport of dust to Westmorland, the EER requires a demonstration of a clear causal relationship and the limited data available do not rise to that level.

We also disagree with the commenter that the location of the thunderstorms over time is not relevant to a cause and effect analysis. The EER explicitly mentions the use of data that show the relationship in time between the event, transport of emissions, and recorded concentrations in exceptional event demonstrations.¹⁰³ Furthermore, in this case, ARB's basic premise is that "thunderstorm activity caused strong outflow winds over areas in close proximity to Imperial County monitors...[which contributed] to the elevated PM₁₀ concentrations that were

103 72 FR 13560, 13573.

recorded in Imperial County on that day.”¹⁰⁴ ARB could have attempted to provide more support for its case by, for example, considering whether historical radar data showed thunderstorms were at various locations around the time the high winds occurred.

Given the level of uncertainty as to the cause of the concentration spike at Westmorland during the 19th hour and the statutory requirement that EPA’s exceptional events regulations be based on the principle that protection of public health is the highest priority,¹⁰⁵ we are again led to the conclusion that the data before the Agency does not establish a clear causal relationship between the exceedance and the event that is claimed to have occurred.

The third part of ICAPCD’s comment regarding causal relationship for the Westmorland exceedance criticizes EPA’s use of wind trajectories from the HYSPLIT model since it is expected to capture the underlying flow pattern but may not be able to capture the direction of short-lived high winds that could transport dust from the north to Westmorland.

EPA acknowledges that the HYSPLIT model uses meteorological data with relatively coarse resolution, e.g., a 40 km grid, and that there may be short-lived or local deviations from the overall wind flow. However, it remains true that the HYSPLIT

¹⁰⁴ September NED, p. 2.

back-trajectories are inconsistent with transport from northern stations since they show winds from the south.¹⁰⁶ The HYSPLIT data simply add to the list of inconsistencies in the State's explanation. In addition, ICAPCD's suggestion that the high winds were "short-lived" is inconsistent with ARB's hypothesis of straight line transport from the Oasis or Palo Verde stations for an hour or more over the 45-55 mile distance to Westmorland. Thus EPA disagrees with this comment.

EE #17: ICAPCD (Attachment) makes an additional two-part comment about the causal relationship claim for the September 2, 2006 exceedances at both the Calexico and Westmorland monitoring stations. In order to buttress its argument that these exceedances were not the result of recurring anthropogenic sources within Imperial Valley, ICAPCD first states that it is extremely unlikely that all monitors in the County would simultaneously have had unusually high PM₁₀ concentrations if the causes were local to the monitors. The second part of the additional comment states that since there were no high winds throughout Imperial Valley on September 2, 2006, the cause of the exceedances could not have been unpaved roads or agricultural or OHV land within the Valley.

Response: With respect to the first part of ICAPCD's comment, EPA acknowledged the elevation of PM₁₀ at all monitors,

105 See CAA section 319(b) (3) (A) (i) .

but did not take a position on whether the causes were local or regional.¹⁰⁷ Rather, we concluded that a clear causal relationship had not been demonstrated since the regional sources alleged by ARB to be the cause were not identified. Related to this lack of identification of the contributing sources, EPA found that the State did not demonstrate that the event was not reasonably controllable or preventable as there was no attempt to analyze controls on the non-local sources. Thus this comment does not affect our decision to not concur with the State's exceptional event claims.

With respect to the second part of ICAPCD's comment, as discussed above, the State argued that high winds associated with thunderstorm activity led to the generation of dust north of the County, which was then transported to the Westmorland monitor. Even though agricultural land and other anthropogenic sources do exist in areas north of the County including Oasis,¹⁰⁸ where the State claimed winds were high, the State made no attempt to analyze controls on contributing sources outside the County in order to address the EER requirement that the event must be "not reasonably controllable or preventable." Thus, this requirement was not met even if the commenter's arguments regarding transport were correct. With respect to the Calxico exceedances, the

106 2009 EE decision, p. 17.

107 2009 EE decision, p. 14.

108 See Figure 1 in the final TSD.

State speculated that high winds occurred east and southeast of Calexico based on extrapolation of a west to east trend of increasing wind speed. The same argument could have been used to conclude that there was high wind east of Calexico within Imperial County, including over agricultural and OHV lands. Therefore the commenter's claim that there were no high winds throughout the Imperial County is not completely supported by the State's own arguments that a high wind event occurred.

5. Concentrations in Excess of Normal Historical Fluctuations

EE #18: Comite cites additional support for nonconcurrence beyond what was relied upon by EPA. Specifically, the commenter states that numerous monitored exceedances comparable to those that Imperial County seeks to exclude from the data have been measured in the County from 2003-2007. Therefore, the commenter claims, the concentrations are not "in excess of normal historical fluctuations" as required by the rule and are not exceptional events.

Response: EPA's conclusions about the requirement that the events be associated with measured concentrations in excess of normal historical fluctuations mainly relied on the concentrations' rarity relative to past measurements. For example, the September NED states that the 167 $\mu\text{g}/\text{m}^3$ measurement at the Westmorland station was in the 98th percentile of all PM_{10} recordings at that station in the 2001-2007 time period. As

explained in our 2009 EE decision,¹⁰⁹ we found similar evidence that the exceedances measured on the other days in question also exceeded normal historical fluctuations. However, we do agree with the commenter that the monitoring data for Imperial County continue to show violations of the 24-hour PM₁₀ standard. We believe that improvements to the ICAPCD's rules will lead to improvements in air quality and we note that this commenter does not disagree with EPA's conclusions regarding the State's exceptional events requests, or with EPA's proposal to disapprove Regulation VIII.

6. Level of Documentation Required for EER

EE #19: ICAPCD (Attachment) takes issue with EPA's suggestions that additional data and analysis would have helped establish causality for the 2006 Westmorland and the 2007 events. Specifically, ICAPCD states:

Although EPA suggests that higher levels of documentation for source attribution, thunderstorm activity, or investigation of other potential causes would be preferred, EPA does not suggest reasonable, technically implementable analyses to achieve these higher levels of documentation. We would question what technical analyses EPA suggests should be conducted. We would also question whether these analyses and the required level of data are achievable or realistic

109 pp. 25-27.

now or in the future for similar events in Imperial County and in other areas (particularly those surrounded by remote, non-populated, non-monitored source areas), and whether these analyses exceed the requirements for SIP planning itself. EPA has not (and, we believe, cannot) propose reasonable, technically achievable investigations and analyses superior to those produced by the District and ARB that would address EPA's stated concerns. Thus, we find that both EPA's conclusions on causality and EPA's position on the level of analysis required to demonstrate causality are incorrect and inconsistent with the purpose of the EER....Such a narrow application of the EER will preclude states from excluding from regulatory consideration exceptional PM data that are completely inappropriate for inclusion in the normal planning process.

ICAPCD also includes a table on page A-8 which cites specific passages of EPA's 2009 EE decision pertaining to source apportionment, satellite imagery, and consideration of other causes.

Response: Regarding the need for better source apportionment data, it is important to identify contributing sources when evaluating exceptional event claims involving windblown dust because it must be demonstrated that anthropogenic sources contributing to the exceedances at issue were reasonably

controlled.¹¹⁰ Better source identification is especially important in situations where we do not have confidence that all potential anthropogenic sources are reasonably controlled and where there are exceedances just above the NAAQS (such as the April 12, 2007 exceedance at Westmorland) which may have been preventable with additional controls. In addition, the inability to identify the source of the PM emissions associated with a wind event (i.e., the "cause" of the dust that led to the exceedance) hinders our ability to make affirmative findings that the "clear causal relationship" and "but for" provisions of the EER have been satisfied. A County-wide monthly average emission inventory such as the one used by ARB that omits some source types (e.g., OHVs) is insufficient for these purposes.

While perhaps not required for all demonstrations, our suggestion for a wind field and a more highly resolved inventory are not unreasonable given ARB's failure in the present case to demonstrate that reasonable controls were in place for contributing sources. Moreover, a more highly resolved inventory would provide better support for any future exceptional events claims involving Imperial County. Another method ARB could have

110 See, e.g., 2009 EE decision, p. 7 and our responses to comments EE #s 1 and 4. See also 72 FR 49046, 49051 (August 27, 2007) and 72 FR 13560, 13566, footnote 11, explaining that the weight of evidence approach to our analysis may consider winds that produce emissions contributed to by anthropogenic activities that have been controlled to the extent possible through use of all reasonably available reasonable and appropriate measures.

potentially considered for identifying the source of the emissions and supporting its claim of a causal relationship is to collect and examine pollutant species-specific information. As discussed in the EER preamble,¹¹¹ such information may be available through routine speciation, monitoring networks, or from selective laboratory analysis of archived particulate matter filters for the day thought to be impacted by an event. In this case, such an analysis might have helped ascertain how much of the PM₁₀ that impacted certain monitors was from agricultural sources versus natural desert sources.

Regarding ICAPCD's objection to our statement that the satellite imagery provided was not frequent enough to compare the images with the timing of the concentration spike at Westmorland during the 19th hour,¹¹² we note that ARB could have provided additional information to supplement the satellite imagery. Such information could include, but may not be limited to radar data and weather observations that note the presence of blowing dust in areas around the monitors.

Finally, ICAPCD takes exception to our desire for better documentation regarding the investigation of other potential causes. In this regard, ARB made the following statement:¹¹³

(ICAPCD) investigated emission generating activities during

111 72 FR 13560, 13573.

112 2009 EPA decision, pp 17-18.

113 September NED, p. 2.

this episode, and found that PM₁₀ emissions for BACM controlled sources were approximately constant before, during and after the event. The District determined that the... concentrations of PM₁₀...were instead primarily the result of wind-entrained dust...associated with a mesoscale convective system...

Although the preceding passage suggests that ICAPCD conducted an active investigation of other emission generating activities on the day of the event, this claim is largely unsupported except for an interoffice memo included in Attachment H to the September NED. The memo states that various records were inspected in 2008 but that no inspections were conducted on the day of the event. We were thus left wondering how a file review conducted two years after the fact qualifies as an investigation of emission generating activities "during [the]episode" and how ICAPCD came to the somewhat substantial conclusion that emissions from BACM controlled sources were constant before, during, and after the event.

E. OHV Controls

OHV #1: ICAPCD believes that EPA should have concurred with all of the exceptional event requests associated with high winds as discussed in the Exceptional Events comments summarized in section II.D above. As a result, ICAPCD believes that windblown dust from open areas is not a significant source category in

Imperial County, and therefore is not subject to the BACM requirement as part of the SIP.

Response: In our proposed action on Regulation VIII, we explained why windblown dust from open areas is treated as a significant source category subject to BACM.¹¹⁴ We have not received information in the comments or elsewhere that changes this conclusion or the related decision to not concur with the State's exceptional event requests for Imperial County. See also responses to Exceptional Events comments in section II.D above.

OHV #2: CBD comments that BLM land is the largest PM₁₀ source in Imperial County and should be subject to the same controls as adjacent land. CBD believes the Dust Control Plan (DCP) requirement for BLM land in Rule 800 section F.5 is unenforceable, in conflict with the CAA, while other areas are subject to more stringent Regulation VIII requirements.

In contrast, ICAPCD believes that Rule 800's DCP implements BACM, and that Rule 800's exemption for BLM does not relax other Regulation VIII requirements. For example, Rule 800 section F.5.c requires BLM's DCP to be consistent with Rules 804 and 805 except where otherwise prohibited, in which case section F.5.e requires all feasible control measures during off-road events. ICAPCD also notes that where there are such prohibitions, section F.5.d requires the DCP to discuss and implement "other possible

¹¹⁴ Proposal TSD, pp. 5-7.

control measures" and that Rule 800 section D.3 requires the DCP to be submitted to ICAPCD, ARB and EPA for review and comment and to be updated every two years.

ICAPCD believes BLM should be treated separately in Regulation VIII because there are many restrictions imposed by a variety of laws other than the CAA that apply to actions on federal lands and that the District's involvement in these issues would delay implementation of the PM control program on BLM lands. ICAPCD also believes that BLM should be treated separately because some federal land uses preclude traditional dust controls and because BLM's OHV areas are far from Imperial County populations. ICAPCD argues that even if Rule 800 section F.5.c corresponds to requirements that are less effective than those of Rules 804 and 805, such lower stringency is both necessary and appropriate given the special nature of BLM lands.

BLM agrees that many traditional BACM are not possible on federal land because of the large expanses of desert ecosystems.

BLM continues evaluating the DCP, however, which has led to closing areas and routes to vehicle use, restoring closed surfaces to natural conditions, hardening high traffic areas, posting and enforcing speed limits, educating desert users, and controlling dust from non-OHV activities.

Response: BACM is required but has not been demonstrated for

OHV activity on BLM land in Imperial County.¹¹⁵ EPA guidance explains that this demonstration should include evaluation and documentation of the technological and economic feasibility of potential control measures, including implementation of measures on a limited basis if full implementation is not feasible. As stated in our guidance, "the documentation should compare the control efficiency of technologically-feasible measures, their energy and environmental impacts and the costs of implementation."¹¹⁶ ICAPCD's demonstration should include careful consideration of analogous controls implemented on private lands in Imperial County and on public lands in Maricopa and Clark Counties and elsewhere, as well as controls recommended in EPA's RACM guidance,¹¹⁷ and suggestions provided in our proposal¹¹⁸ and comments on the proposal.¹¹⁹

The evaluation of technological feasibility may appropriately consider the alleged "special nature" of BLM lands. Such an evaluation, if conducted appropriately, may be sufficient to demonstrate that what constitutes BACM for BLM land in Imperial County is different from what constitutes BACM in other geographical areas and for private land in Imperial County. The

115 Proposal TSD, pp. 7-8.

116 General Preamble Addendum at 42012-42014.

117 57 FR 18070, 18072.

118 See proposal TSD, pp. 8 and 14-15.

119 Moreover, as stated in the General Preamble Addendum at 42013, "any control measures that a commenter indicates during

information provided in the comments and Regulation VIII submittal, however, is not sufficient to support such a distinction. For example, ICAPCD and other commenters have not demonstrated how existing BLM controls implement BACM in the Plaster City areas, which are open to OHV activity at all times, and, if such controls do constitute BACM, why they cannot be incorporated into Regulation VIII and the SIP.

Furthermore, with regard to CBD's comment concerning the enforceability of DCPs, state and local requirements that implement BACM are subject to the enforceability requirement of CAA section 110(a). As we stated in our proposal, BACM has not been demonstrated for OHV sources because, among other things, none of the OHV restrictions are in regulatory form and submitted for inclusion in the SIP.¹²⁰

OHV #3: OWD notes that California State Parks (CSP) manages OHV recreational activity in Imperial County at Heber Dunes State Vehicular Recreation Area, Ocotillo Wells SVRA, and in an interdepartmental joint management agreement at the Freeman Properties immediately north of Ocotillo Wells SVRA and east of Anza Borrego Desert State Park. OWD also notes that Ocotillo Wells SVRA alone represents approximately 85,000 acres of managed OHV recreational activity within Imperial County. While much of

the public comment period is available for a given area should be reviewed by the planning agency."

¹²⁰ Proposal TSD, p. 14.

this land is designated trail riding only and is primarily defined by terrain constraints, OWD states that the majority of the area is designated open riding, where OHVs are not limited to defined trails. Rather than implement generalized BACM for OHV activity in Ocotillo Wells SVRA and other State Parks, OWD explains that it has adopted State mandated soil standards, a habitat monitoring system and other policies tailored for the case-by-case conditions found in each park unit. OWD believes that fencing, and then maintaining, a vast amount of land is neither economically nor environmentally feasible. OWD also believes that watering, laying gravel, or applying a chemical solution to the miles of trails that would be encompassed is neither economically nor environmentally feasible. In contrast, CBD argues that further implementation of Rule 804 and additional OHV controls may be needed for State lands including the Ocotillo Wells SVRA in order to attain air quality standards.

Response: Rule 804 requires all persons, including public entities such as CSP, with jurisdiction over open areas in Imperial County with over 1000 square feet of disturbed surface area to maintain a stabilized surface, limit opacity to 20% and comply with at least one of the following: (a) apply and maintain water or dust suppressant to all unvegetated areas; (b) establish vegetation on all previously disturbed areas; or (c) pave, gravel

or chemically stabilize.¹²¹ OWD's comment acknowledges that CSP has jurisdiction over open areas with over 1000 square feet of disturbed surface area within Imperial County. Because these areas are not addressed by exemptions in Rule 800 section E or Rule 804 section D,¹²² these areas must comply with the above requirements. However, from OWD's comment, CSP is clearly not currently complying with these requirements. As a result of the inclusion of Rule 804 into the SIP, these requirements will become federally enforceable upon the effective date of this final action, and such noncompliance could result in civil action under CAA section 113 and/or 304.

OHV #4: Various commenters argue that controls suggested in our proposal as part of the BACM analysis that ICAPCD still needs to conduct would not reduce PM₁₀ impacts from OHVs in Imperial County.

- Many commenters oppose further restrictions during the summer, claiming that OHV activity and emissions are very low in Imperial County due to high temperatures and existing red sticker regulations that restrict certain vehicles during the summer. BLM concurs that OHV use is already lowest in the summer, and ICAPCD also concurs and argues

121 ICAPCD Rule 804, sections B, C.29, E and F.

122 See also "Fugitive Dust Control Plan," Bureau of Land Management El Centro Field Office, June 29, 2006; "Fugitive Dust Control Plan," Bureau of Land Management El Centro Field Office,

that OHV restrictions during the summer would burden public resources without reducing emissions. However, one commenter (0100) states that OHV use during summer nights is a great activity which creates minimal dust because travel is at low speeds on established trails. Another commenter (0204) indicates that many promoters run OHV races at night that allow for fun recreational activity in cooler temperatures. This commenter believes night races decrease risks to spectators which is more important than reducing dust emissions. Some commenters also observe that wind events can occur in the summer and cause severe dust days. By contrast, another commenter (0146) believes that the desert is mainly dry and free of wind in the summer.

- ICAPCD believes that restrictions like those in place in Arizona, during pollution advisory days, would be unproductive because high-PM forecasts in Imperial County only occur on high-wind days when OHVs are not used.
- Many commenters (e.g., 0094) observe that OHVs are already restricted to certain areas, causing crowding and injuries. ICAPCD notes that OHVs are restricted to 11% of local BLM land, and additional closure would probably shift OHV activity and emissions to other areas nearby. OWD also

believes EPA's action could force OHV users to other areas, causing environmental effects outside Imperial County.

- ICAPCD comments that EPA cannot demonstrate that OHV restrictions would reduce windblown dust emissions because there is no basis for EPA's contention that surfaces impacted by OHVs would form any appreciable crust given Imperial's low level of rain. OWD similarly comments that crust repair would be difficult due to the limited rain in Imperial County. Another commenter (0120) believes that restricting OHV areas could increase PM₁₀ emissions because more vehicles in smaller areas would disturb more soil that cannot crust over. See also comment EE #8.
- OWD comments that fencing, watering, gravelling or chemically stabilizing miles of OHV areas is not feasible. For example, water resources are scarce and modification of existing OHV trails could alter natural drainage patterns and increase erosion.

Response: EPA believes that some of the information provided in these comments could be relevant considerations in the comprehensive BACM analysis that ICAPCD needs to undertake in order to determine what controls constitute BACM for OHV activity in Imperial County. However, in general, the comments are conclusory and not supported by data, detailed information, or other evidence that would be required for an adequate BACM

demonstration under our guidance.¹²³ As summarized in the guidance:

In summary, the State must document its selection of BACM by showing what control measures applicable to each source category (not shown to be de minimis) were considered. The control measures selected should preferably be measures that will prevent PM-10 emissions rather than temporarily reduce them. The documentation should compare the control efficiency of technologically-feasible measures, their energy and environmental impacts and the costs of implementation.¹²⁴

Furthermore, contradictions in the comments also serve to illustrate that there are fundamental factual questions that need to be addressed about the amount of OHV activity during different seasons and different times of the day, and the best ways to mitigate emissions from such activities. At this juncture, ICAPCD has not conducted an adequate analysis.

OHV #5: Many commenters (e.g., 0108 and OWD) state that further OHV restrictions would hurt the already depressed local economy, and cite potential effects on local business owners, farmers, land owners, OHV users, race car owners, construction companies, ranchers, the Imperial Irrigation District and others. Commenters observe that recreational activities generate

123 General Preamble Addendum at 42010-42014.

substantial revenue (0196), and one (0156.1) claims that OHVs have contributed several hundred million dollars to the local economy. ICAPCD believes that the economic cost of OHV activity restrictions is far more than appropriate for BACM. For example, ICAPCD estimates that closing the Imperial Sand Dunes Recreational Area would cost \$370,000 to \$640,000 per ton of PM₁₀ reductions. ICAPCD provides specific references to support its cost/benefit analysis. Another commenter (0219) similarly believes that additional OHV restrictions, such as closing land in the summer, would provide few benefits given the relatively small emissions from OHVs, but would have significant economic impacts.

Response: We appreciate the value of OHV tourism to the local economy, and agree that ICAPCD must consider economic feasibility in BACM analyses evaluating potential controls for emissions from OHV activities. However, the relevant inquiry in the economic feasibility analysis required in BACM determinations is "the cost of reducing emissions from a particular source category and costs incurred by similar sources that have implemented emission reductions."¹²⁵ In this case, the cost of OHV restrictions on OHV area owners (i.e., the State and federal governments) and users would appear to be minimal, and the secondary economic impacts on businesses supporting OHV tourism

124 *Id.* at 42014.

are not relevant to the required BACM analysis. In any event, ICAPCD needs to evaluate the economic feasibility of potential controls, including those adopted in other areas, in determining what controls constitute BACM in this area.

OHV #6: EcoLogic asks EPA to clarify whether and where OHV restrictions are being contemplated in the Imperial Sand Dunes Recreation Area and elsewhere and to what extent OHV activity on federal land is subject to the proposed rule or ICAPCD jurisdiction. EcoLogic and another commenter (0141) also request clarification on which of the 250 square miles of OHV areas EPA is asking ICAPCD to evaluate for closure and what the basis is for claiming that these areas are likely to impact populations.

Response: State and federal agencies are subject to many local requirements including Regulation VIII and other air quality related ICAPCD rules.¹²⁶ Our proposal explains why ICAPCD must analyze whether additional controls (potentially including closure) are appropriate for public land in Imperial County open to OHVs, which ICAPCD estimates at over 250 square miles.¹²⁷ We did not identify any specific geographic areas needing more or less analysis or control or having more or less impact on populations. Rather, in the analysis ICAPCD should consider all potential available OHV controls in all OHV areas in Imperial

125 General Preamble Addendum at 42013.

126 See CAA section 116.

127 See, e.g., proposal TSD, pp. 8 and 13-15.

County and, where feasible, should consider whether different areas within the County have different impacts on populations or areas with exceedances of the NAAQS.

OHV #7: Several commenters believe additional OHV restrictions should be analyzed and/or incorporated into Regulation VIII. CBD believes that OHV requirements in Rule 804 are too vague to be enforceable as required by CAA section 110(a), particularly regarding BLM and State managed land. CBD believes Regulation VIII should require specific BACM measures, such as restrictions on the number of OHV vehicles operating each day, to improve emission quantification and control. CBD believes such carrying capacity caps or other restrictions should also address weather conditions when they exacerbate PM₁₀ emissions, such as during windy weather and the summer. Comite comments that ICAPCD should analyze whether OHV permit requirements, such as those that are required in San Bernardino County, should be required in Imperial County. Comite also believes that ICAPCD should analyze controls described in the California State Parks Off-Highway Motor Vehicle Recreation Division's 2008 Soil Conservation Standard and Guidelines.¹²⁸ Lastly, instead of decreasing the size of OHV areas, one commenter (0120) suggested rotating OHV areas to help surface crust formation.

¹²⁸ Submitted as Exhibit D to Comite comment letter.

Response: The commenters as a group make constructive suggestions that would be appropriate for consideration in a comprehensive evaluation of BACM for this source category. We believe ICAPCD should analyze all potential available OHV controls to meet the CAA's BACM requirement, including those mentioned in the comments and those adopted in other areas, pursuant to EPA guidance.¹²⁹

F. Definition of Disturbed Surface (DS)

DS #1: ICAPCD believes the term "disturbed surface" is self-evident and that no questions have been raised about it since rule adoption. ICAPCD believes Rule 804 is clear that an area is deemed disturbed if it shows any sign of man-made disturbance (e.g., vehicle traffic) and the owner/operator cannot prove that the area meets the characteristics of a stabilized surface. ICAPCD is willing to define this term more clearly during the next revision to Rule 101, but strongly objects to EPA disapproving Regulation VIII on this basis. In contrast, CBD supports EPA's concerns regarding this definition in Regulation VIII, and further believes the definition should be tailored to Imperial Valley and explicitly include open areas on BLM land that emit significant PM₁₀ including the Algodones Dunes. In this regard, CBD suggests specific edits to SJVUAPCD's analogous rule.

¹²⁹ See, e.g., General Preamble Addendum at 42012-42013.

Response: We believe the explanation provided in ICAPCD's comment is a logical interpretation of the undefined term in its regulation. However, we also believe that alternate definitions are possible (such as that recommended by CBD in its comment), and it is common practice to define all terms used in rules that are needed in order to ensure clarity and enforceability. We encourage ICAPCD to clarify its regulation by including an appropriate definition of this critical term and to consider CBD's recommendations for the wording of the rule.

G. Unpaved Road (UR) Controls

UR #1: ICAPCD projects that control of unpaved non-farm roads provides 55% of Regulation VIII's emission reductions. ICAPCD believes this demonstrates a good faith effort to reduce PM₁₀ emissions from road stabilization, and asserts that the County is trying to increase funding for such projects. ICAPCD states that the \$2 million/year available to the County Department of Public Works (PWD) for road maintenance and stabilization reflects great needs and low availability of public funds in the County. According to ICAPCD, this budget is for maintenance of 1,350 miles of paved roads which require resurfacing every 10-15 years, or 90 miles of extensive maintenance each year. Thus, ICAPCD argues that allocation of 9% of this budget to stabilize 19 miles of unpaved road represents, contrary to EPA's assertion, the most expedited schedule possible

with the present level of available funding.

Response: Where economic feasibility of control depends on public funding, EPA will consider past funding and the future availability of funding sources to determine if a good faith effort is being made to implement BACM expeditiously.¹³⁰ The fact that unpaved road controls provide 55% of Regulation VIII's estimated emission reductions is not in itself sufficient to demonstrate good faith efforts to control road dust expeditiously. Alternatively, for example, this high percentage of the total amount of reductions could occur if other sources are under-controlled or are less feasible to control. Nonetheless, EPA believes that some of the information ICAPCD provides in its comment on this point could help to demonstrate a good faith effort to control road dust expeditiously. Given ICAPCD and Imperial County's limited resources, we do not believe this analysis needs to be exhaustive, but it should be more thorough and documented than presented in the Regulation VIII submittal and this comment. For example, ICAPCD indicates in this comment that the County is trying to increase funding for road stabilization but provides no documentation to help establish this point. Nor has ICAPCD explained how the road stabilization budget was derived in light of various federal, State, and local (including local Measure D) funding sources for

130 Proposal TSD, p. 16, and General Preamble Addendum at 42013.

public works construction and maintenance, or otherwise provided the demonstration contemplated by the relevant EPA guidance.¹³¹

UR #2: ICAPCD disagrees with EPA that there could be problems enforcing Rule 805 section E.7. As evidence, ICAPCD explains that Imperial County PWD is meeting its commitment to implement its submitted plan, which includes stabilizing different unpaved roads each year and maintaining all stabilized roads as intended by the rule.

Response: CAA section 110(a) requires that control measures be enforceable. While Rule 805 section E.7 requires that a compliance plan be submitted to ICAPCD, the rule is not clear about the specific requirements of the plan (i.e., that the County must stabilize different roads each year and must maintain all stabilized roads) and does not contain a mandate that the terms of the plan be carried out. Evidence that Imperial County PWD is in fact currently implementing the plan is not sufficient to ensure enforceability as required by the CAA.¹³² ICAPCD should revise the rule to clarify this section consistent with enforceability requirements of CAA section 110(a).

UR #3: Comite believes that ICAPCD should incorporate additional restrictions into Regulation VIII, including property line visible emissions (VE) limits such as those adopted by Maricopa County and SCAQMD, dust controls for unpaved roads

¹³¹ See proposal TSD, p. 16.

subject to Rule 805 section E.7, and other more stringent requirements adopted by SCAQMD, SJVUAPCD, Maricopa County and Clark County.

Response: ICAPCD's analysis of BACM did consider controls implemented in other areas, including those adopted by SCAQMD, SJVUACPD, and Maricopa and Clark Counties. Our proposal TSD recommends several specific controls from these areas for further consideration by ICAPCD, including imposition of a fence-line opacity standard.¹³³

However, with the exception of the deficiencies identified in our proposal, we believe that ICAPCD sufficiently analyzed controls in other areas for potential BACM.¹³⁴ For example, ICAPCD explains that SCAQMD has only a 0% fence-line opacity standard, whereas ICAPCD and other agencies with adopted rules approved as BACM all have a similar general 20% opacity standard applicable everywhere, and not just at the fence-line.¹³⁵ ICAPCD claims that SCAQMD's 0% fence-line standard is less stringent than a general 20% standard. While it is difficult to compare the two standards,¹³⁶ we do not have evidence that SCAQMD's

¹³² See *id.*, p. 9.

¹³³ *Id.*, p. 11.

¹³⁴ 2005 BACM analysis, chapter 4, and 2009 PM₁₀ SIP, table 4.2.

¹³⁵ 2005 BACM analysis, p. 21.

¹³⁶ For example, a 40% opacity plume in the middle of a large property that disperses to 0% opacity by the property fence-line violates ICAPCD's rule but not SCAQMD's. Conversely, a 10% opacity plume that disperses to 5% opacity by the fence-line violates SCAQMD's rule but not ICAPCD's.

standard is more stringent than the general standard used by ICAPCD and by other air districts.

UR #4: One commenter (0154) states that it is not feasible or cost effective to eliminate all dust from dirt roads.

Response: We agree with this comment. Neither Regulation VIII nor our proposal or this final action assumes that dust emissions can be completely eliminated from farm and non-farm dirt roads.

H. Border Patrol (BP) Controls

BP #1: ICAPCD comments that Rule 800 section F.6.c does not explicitly exempt BP from fugitive dust controls, but requires BP to control dust from roads it owns/operates consistent with Rule 805 except where inconsistent with BP's authority or mission. ICAPCD indicates that, while BP does not own any roads, it uses public roads to accomplish its mission, and some roads adjacent to the border are used exclusively by BP. ICAPCD states that most of these roads are below Rule 805's applicability threshold, are located in remote areas that are for the most part restricted to BP vehicles, and PM₁₀ controls are not feasible and are inconsistent with BP's mission. ICAPCD explains that although BP neither owns nor operates these roads, BP is committed to implement PM₁₀ controls such as vehicle speed restrictions and access controls. ICAPCD indicates that since adoption of Regulation VIII, BP has submitted two productive DCPs.

Therefore, ICAPCD disagrees with EPA's recommendation to remove or narrow the exemption for BP activities, and proposes to continue addressing BP through a DCP requirement to insure that BP continues controlling fugitive dust.

Response: First, we note that nothing in our proposal affects Regulation VIII's requirement for BP to develop and implement DCPs pursuant to Rule 800 sections F.6.a and F.6.b. However, ICAPCD's explanation is unclear as to whether or not BP operates any roads subject to the rule. If ICAPCD can support its assertion that BP neither owns nor operates such roads, the exemption in Rule 800 section F.6.c. is simply unnecessary and should be removed. If BP does own or operate such roads, we continue to believe that the exemption is unnecessarily broad and should be removed or narrowed and demonstrated to be consistent with BACM requirements.

ICAPCD offers no evidence or explanation to support its contention that Rule 805 requirements are potentially inconsistent with BP's authority and/or mission. We also note that BP has not raised concerns with our proposal, although we informed BP of it before publication. EPA appreciates BP's efforts to limit PM₁₀ pollution through DCPs. Our concern, however, is with ICAPCD's Regulation VIII submittal and the lack of clarity in, and analysis to support, the actual provisions in Regulation VIII intended to govern these activities.

BP #2: OWD comments that BP frequently goes off-road within Ocotillo Wells SVRA, beyond OWD's control.

Response: Rule 804 section E imposes requirements on owners of open areas such as Ocotillo Wells SVRA regardless of who owns vehicles driving on the open areas. Nothing in our proposal would affect these existing ICAPCD requirements.

I. Unpaved Farm Roads and Traffic Areas (UFRTA) Controls

Introduction

The comments summarized in this section and sections II.J and K relate to ICAPCD Rule 806, Conservation Management Practices. In discussing our proposal regarding Rule 806, a number of these comments address various aspects of analogous rules adopted by state and local agencies in California and Arizona for controlling PM₁₀ from agricultural sources. All of these rules are menu-based and as such divide the control measures, known as conservation management practices (CMPs) or best management practices (BMP), into three or more menus known as "categories." We provide the following information on these rules as an introduction to inform our responses to the comments in this section and sections II.J and K.

ICAPCD Rule 806, Conservation Management Practices, is a menu-based rule that has four categories:

- land preparation and cultivation
- harvesting

- unpaved roads
- unpaved traffic areas

All persons who own or operate an agricultural operation site of forty acres or more are required to implement one CMP from each of these categories. Table 3 summarizes the relevant categories from Rule 806 and the other menu based rules to which we refer:

Table 3

State or Local Agency	Rule	Area	Categories for On-field Agricultural Operations	Categories for Unpaved Ag. Roads and Traffic Areas
Imperial County APCD (ICAPCD)	806	Imperial County	<ul style="list-style-type: none"> ▪ Land Preparation and Cultivation (including tillage) ▪ Harvesting 	<ul style="list-style-type: none"> ▪ Unpaved Roads ▪ Unpaved Traffic Areas
San Joaquin Valley Unified APCD (SJVUAPCD)	4550	San Joaquin Valley Planning Area ¹³⁷	<ul style="list-style-type: none"> ▪ Land Preparation and Cultivation (including tillage) ▪ Harvest ▪ Cropland - Other 	<ul style="list-style-type: none"> ▪ Unpaved Roads ▪ Unpaved Traffic Areas
Arizona Department of Environmental Quality (ADEQ)	Arizona Administrative Code (A.A.C) R18-2-610 and R18-2-611	Phoenix Planning Area ¹³⁸	<ul style="list-style-type: none"> ▪ Tillage and Harvest ▪ Cropland 	<ul style="list-style-type: none"> ▪ Noncropland
Great Basin	502	Alpine, Inyo,	<ul style="list-style-type: none"> ▪ Land 	<ul style="list-style-type: none"> ▪ Unpaved

137 SJVUAPCD's jurisdiction includes the entire counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, and Kings and part of Kern County. SJVUAPCD does not include the parts of East Kern that are not in the San Joaquin Valley Air Basin. See 40 CFR 81.305.

138 The Phoenix Planning Area includes Maricopa County and a portion of Pinal County. See 40 CFR 81.303.

Unified APCD (GBUAPCD)		and Mono Counties ¹³⁹	preparation ▪Harvest ▪Other Cultural Practices	Roads ▪Unpaved Traffic Areas
South Coast AQMD	Rule 403 And Agricultural Handbook	South Coast Air Basin ¹⁴⁰	▪Active Conservation Practices ▪Inactive Conservation Practices	▪Unpaved Roads
South Coast AQMD	Rule 403 And Coachella Valley Agricultural Handbook	Coachella Valley Planning Area	▪Active Conservation Practices ▪Inactive Conservation Practices	▪Unpaved Roads

We also refer below to SJVUAPCD's Rule 8081, Agricultural Sources, which has opacity and stabilization requirements for high traffic agricultural unpaved roads and traffic areas.

UFRTA #1: Comite believes that California has not demonstrated why agricultural paved and unpaved roads should be subject to less stringent requirements than other roads in Imperial County (i.e., those subject to Rule 803 regarding track-out/carry-out and Rule 805) and cites San Joaquin Valley where such roads must meet CMPs as well as general requirements. In contrast, ICAPCD and the Farm Bureau believe Regulation VIII is more stringent regarding unpaved farm roads and traffic areas

139 See section 1 and 2 of GBUAPCD Rule 502. Also see 40 CFR 81.305.

140 SCAQMD's jurisdiction includes the South Coast Air Basin and the Coachella Valley Planning Area. For a description of the boundaries of the Los Angeles-South Coast Air Basin Area and the Coachella Valley Planning Area, see 40 CFR 81.305. The South Coast Air Basin includes all of Orange County and the more populated portions of Los Angeles, San Bernardino, and Riverside

than analogous rules in other areas even though Imperial County farm roads and traffic areas are not subject to opacity limits. These latter commenters note that Rule 806 requires CMPs for all unpaved roads and traffic areas regardless of vehicle trips per day (VTD), unlike SJVUAPCD Rule 4550. COLAB also explains that ICAPCD Rule 806 was designed to address all unpaved roads by applying to parcels greater than 40 acres (97% of farmland in Imperial County) compared to SJVUAPCD's Rule 4550 which addresses roads on parcels larger than 100 acres (91% of farmland in the San Joaquin Valley). Lastly, ICAPCD and the Farm Bureau assert that most private unpaved farm roads are less used and are therefore below Rule 805's 50 VTD threshold. Regardless of VTD, however, these latter commenters argue that owners of these roads must implement Rule 806 CMPs.

Response: EPA's proposal noted that ICAPCD has not demonstrated BACM for unpaved farm roads and traffic areas because of the exemption in Rule 805 section D.2 from opacity and stabilization requirements applicable to non-agricultural operation sites. EPA further noted that SJVUAPCD does not provide such an exemption, and ICAPCD had not justified such an exemption.¹⁴¹

ICAPCD and other commenters do not offer evidence that

Counties. The Coachella Valley Planning Area includes central Riverside County in the Salton Sea Basin.

141 Proposal TSD, pp. 8-9.

Regulation VIII is as stringent as comparable controls in this regard, but instead claim that Regulation VIII is more stringent in other respects. For example, no commenter disputes our conclusion that an unpaved farm road with 75 VTD would be subject to opacity standards in SJVUAPCD's Rule 8081 but not in ICAPCD's Regulation VIII. However, ICAPCD and others argue that the applicability threshold for unpaved farm roads subject to Rule 806, for example, is more stringent than SJVUAPCD's analogous requirements. Because opacity and surface stabilization requirements on heavily-used farm roads and traffic areas are being implemented in other areas, we believe that, absent an adequate explanation, these requirements are at least presumptively BACM for this source category in Imperial County. Accordingly, these controls should be evaluated as potential BACM by ICAPCD. However, as stated previously, ICAPCD may consider conditions specific to Imperial County in a revised BACM evaluation for unpaved roads and traffic areas, as appropriate.

We also agree with Comite that it is not clear why Rule 803 section D.1 exempts farm roads and traffic areas from certain carry-out and track-out requirements that apply to similar non-farm roads. We encourage ICAPCD to consider removing this exemption, although such a rule modification is not mandated by the CAA at this time because carry-out/track-out has not been identified as a significant source category subject to the BACM

requirement.

UFRTA #2: Comite believes that Rule 806's CMPs are not sufficiently specific regarding agricultural unpaved roads and traffic areas. In contrast, ICAPCD comments that Rule 806 section F.6 requires CMP plans to include other relevant information, which gives ICAPCD authority to require adequate specificity. COLAB also comments that the CMP forms provided in the rule are examples and if the relevant information was provided the form could be changed.

Response: Issues raised regarding specificity of CMPs for unpaved roads and traffic areas are similar to issues raised regarding the specificity of CMPs for other agricultural operations. See response to comment AL #3 below.

J. Agricultural Land Controls (AL)

See Introduction in section II.I above.

AL #1: ICAPCD comments that Rule 806's CMP requirements are similar to requirements adopted by SJVUAPCD, Maricopa County¹⁴² and SCAQMD,¹⁴³ and are directly based on SJVUAPCD requirements

142 Although ICAPCD refers to requirements adopted by Maricopa County in its comments, Arizona's rules, A.A.C. R18-2-610 and R18-2-611, for controlling PM-10 from agricultural sources apply to some sources beyond the boundaries of Maricopa County.

143 As noted in Table 3 above, SCAQMD's Rule 403 has requirements for agricultural activities that apply to both the South Coast Air Basin and Coachella Valley Planning Area.

that EPA approved as BACM in 2004, citing 69 FR 30035.¹⁴⁴ ICAPCD asserts that the individual CMPs in Rule 806 are similar to those found in SJVUAPCD Rule 4550 and GBUAPCD Rule 502 and concludes that the only differences in the rules are due to differences in local agricultural practices. The Farm Bureau also states that there is little difference between GBUAPCD and ICAPCD control measures.

Response: We agree that many individual CMPs and requirements in the rules outlined in Table 3 are similar. However, this overall similarity does not affect the two specific BACM deficiencies in ICAPCD Rule 806 for tilling and harvesting emissions identified in our proposed action.¹⁴⁵ One of these deficiencies concerns the lack of sufficiently defined requirements in contrast to the application submittal and review processes in the SJVUAPCD and GBUABCD rules that insure more effective implementation and enforcement of the requirements.¹⁴⁶ The other deficiency is related to the number of CMPs required by Rule 806. Rule 806 section E requires one CMP from the "land preparation and cultivation" category and one CMP from the "harvesting" category, while SJVAPCD Rule 4550 requires an additional CMP from the "cropland-other" category. GBUAPCD Rule

144 EPA approved SJVUAPCD Rule 4550 in 2006, not in 2004. See 71 FR 7683. EPA approved a commitment for the San Joaquin Valley CMP Program in 2004. See 69 FR 30006.

145 See 75 FR 8008, 8011-8012.

502 also requires that one CMP each be selected from the "land preparation and cultivation," "harvest," and the "other cultural practices" categories.¹⁴⁷

AL #2: ICAPCD believes that EPA disregards that Imperial County crops are irrigated, and that continued irrigation and conditioning of soil dramatically reduce its potential for both entrained and windblown emissions. ICAPCD believes this fact must be considered when comparing Rule 806 to rules in other areas.

Response: As stated previously above, EPA agrees that it is appropriate to consider conditions specific to an area when evaluating potential BACM.¹⁴⁸ However, most of the harvested cropland in other areas subject to comparable requirements is also irrigated. The following table shows data from the 2007 Census of Agriculture¹⁴⁹ for the total acres of harvested cropland

146 See SJVUAPCD Rule 4550 section 6.3 and 6.4 and GBUAPCD Rule 502 section 6.3 and 6.4.

147 See SJVUAPCD Rule 4550 section 6.2 and SJVUAPCD "List of Conservation Management Practices." See also GBUAPCD Rule 502 section 6.2 and, for example, GBUAPCD Supplemental Application Form for Alfalfa. See also "Conservation Management Practices for Farms in Inyo, Mono and Alpine Counties, Program Description and Plan Application Forms," December 19, 2008, Great Basin Unified Air Pollution Control District, at <http://www.gbuapcd.org/farm/CMPprogramdescriptionandforms.pdf>.

148 General Preamble Addendum at 42010 and 42012.

149 2007 Census of Agriculture, California, State and County Data, and 2007 Census of Agriculture, Arizona, State and County Data, United States Department of Agriculture, National Agricultural Statistics Service. See http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_County_Level/California/cav1.pdf

and the acres of irrigated harvested cropland in relevant counties in California and Arizona. Imperial County and the counties in the SJVUAPCD¹⁵⁰ are included. Riverside County in California¹⁵¹ and Maricopa County in Arizona are also included.

Table 4

County, State	Total Harvested Cropland (acres)	Irrigated Harvested Cropland (acres)
Imperial, CA	375,904	375,167
Maricopa, AZ	190,182	189,141
Riverside County, CA	163,783	158,437
San Joaquin County, CA	444,670	426,670
Stanislaus, CA	307,992	297,053
Merced, CA	466,304	458,017
Madera, CA	264,767	260,596

and

http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_County_Level/Arizona/azv1.pdf.

¹⁵⁰ See footnote 141 above. The census data in Table 4 are for all of Kern County.

¹⁵¹ Of all the counties included in SCAQMD, Riverside County has the largest acreage of harvested cropland. According to the 2007 Census of Agriculture, Orange County has 7,846 acres of harvested cropland, Los Angeles County has 25,829 acres of harvested cropland, San Bernardino County has 27,516 acres of harvested cropland, and Riverside County has 163,783 acres of harvested cropland. 2007 Census of Agriculture, California, State and County Data, United States Department of Agriculture, National Agricultural Statistics Service. See

http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_County_Level/California/cav1.pdf

Fresno, CA	978,948	960,215
Kings, CA	419,964	419,080
Tulare, CA	560,320	540,887
Kern, CA	764,929	756,645

Thus, the mere fact that crops are grown using irrigation in Imperial County does not in and of itself justify different standards for BACM.

AL #3: ICAPCD comments that Rule 806 section F.6 specifies that the CMP plan shall include "other relevant information as determined by the ICAPCD," which gives ICAPCD authority to modify the CMP plans to specify frequency of CMP applicability. Therefore ICAPCD believes a mechanism is in place in the rule for modification of CMPs to provide such details, and therefore this should not be a basis for disapproval of Regulation VIII as BACM. ICAPCD notes its commitment to modify the CMP plans to provide such details.

Response: As noted by ICAPCD, Rule 806 section F.6 provides a mechanism that could be used by ICAPCD to provide greater specificity. However there is no required process in the rule for sources to provide such information to ICAPCD or for ICAPCD to review the CMPs and/or to require revision of the CMPs that sources have chosen to implement. Under section F, sources are only required to prepare a plan containing minimal information

and to maintain a copy of the plan. Thus the CMPs would continue to be broadly defined unless or until ICAPCD proactively determines that greater specificity is needed. Absent such vital details, it would be difficult for regulated entities to know precisely what is required of them to comply with a BACM level of control, and it would be difficult for ICAPCD, EPA, or others to enforce these requirements.¹⁵² In contrast, SJVUAPCD Rule 4550 section 5 requires sources to prepare and submit a CMP application to the District for approval and section 6 requires the District to evaluate and either approve or disapprove the application in writing. GBUAPCD Rule 502 sections 5 and 6 contain substantially identical requirements. Such requirements provide a mandatory process that is far more likely to ensure that the CMPs

152 For instance, one of the CMPs that is both in the "land preparation and cultivation" category in Rule 806 section E.1 and the "harvesting" category in section E.2 is "equipment changes/technological improvements" which is defined in section C.15 as "To modify the equipment such as tilling; increase equipment size; modify land planning and land leveling; match the equipment to row spacing; granting to new varieties or other technological improvements. It reduces the number of passes during an operation, thereby reducing soil disturbance." This definition is too broad to ensure enforceability. Moreover, because there is no mechanism to narrow the definition for a particular agricultural operation, a CMP may be implemented in a manner less stringent than a BACM level of control. In a similarly broad fashion, Rule 806 section C.34 defines "speed limits," a CMP in both the "unpaved roads" category in section E.3 and the "unpaved traffic areas" category in section E.4, as "enforcement of speeds that reduce visible dust emissions. The dust emissions from unpaved roads are a function of speed, meaning reducing speed reduces dust." However, an appropriate speed limit or range of speed limits is not specified or otherwise insured.

are implemented and enforceable at a BACM level of control than the provision in ICAPCD Rule 806.

Finally, even if ICAPCD were to routinely exercise its discretionary authority in Rule 806 to specify the frequency of CMP applicability, the deficiency noted in our proposed action related to lack of CMP specificity extends beyond the issue of frequency.¹⁵³

AL #4: ICAPCD claims that BACM should not be required for harvest activities because the emissions from these activities (0.01 tpd) are negligible. ICAPCD argues that efforts to increase regulation of emissions from harvesting would waste resources. In addition, ICAPCD claims that the CMPs in Rule 806 related to harvesting are similar to those in SJVUAPCD Rule 4550.

Response: ICAPCD has identified tilling emissions as a significant source.¹⁵⁴ As stated in our proposal for this action, measures in Rule 806 for harvesting must also meet BACM because the activities occur at the same facilities and are integrally related to tilling emissions.¹⁵⁵ By analogy, where enforceable volatile organic compound (VOC) reasonably available control technology (RACT) level controls are required for refineries, SIP rules generally impose leak detection and repair requirements on valves, flanges, threaded connections and other related equipment

¹⁵³ See 75 FR 8008, 8011-8012.

¹⁵⁴ Proposal TSD, pp. 5-6.

¹⁵⁵ Proposal TSD, p. 10, footnote 25.

even if emissions from any one of these taken individually might be much smaller than the major source threshold requiring RACT.¹⁵⁶

We agree that individual CMPs for emissions from harvesting activities in Rule 806 are generally similar to CMPs for such emissions in the San Joaquin Valley. However, both SJVUAPCD and GBUAPCD require one more CMP for on-field agricultural sources than does Rule 806.¹⁵⁷ This additional CMP may reduce emissions from harvesting activities. ICAPCD must establish that requiring fewer controls for on-field agricultural activities is consistent with BACM requirements. Thus far ICAPCD has not provided a convincing justification.

AL#5: ICAPCD disagrees with our identification of the requirements of Rule 806 for tilling as a deficiency in the BACM analysis. In support of its position, ICAPCD asserts that San Joaquin Valley sources may select two CMPs that reduce emissions from tilling from the list of measures, but they are not required to do so. ICAPCD also claims that because per-acre emissions from

156 SJVUAPCD Rule 4451, Valves, Pressure Relief Valves, Flanges, Threaded Connections and Process Drains at Petroleum Refineries and Chemical Plants, amended April 20, 2005.

157 See SJVUAPCD Rule 4550 section 6.2 and SJVUAPCD "List of Conservation Management Practices." See also GBUAPCD Rule 502 section 6.2 and, for example, GBUAPCD Supplemental Application Form for Alfalfa. See also "Conservation Management Practices for Farms in Inyo, Mono and Alpine Counties, Program Description and Plan Application Forms," December 19, 2008, Great Basin Unified Air Pollution Control District, at <http://www.gbuapcd.org/farm/CMPprogramdescriptionandforms.pdf>.

land preparation are about four times as high in the San Joaquin Valley as they are in Imperial County, the cost-effectiveness of emission reductions from tilling activities through the implementation of any CMP should be four times as high in Imperial County as in the San Joaquin Valley. For these two reasons, ICAPCD believes that Rule 806 requirements for tilling are as stringent as analogous SJVUAPCD requirements. In contrast, Comite comments that Arizona Rules 18-2-610 and 611 require at least two CMPs from each category in the rule whereas Rule 806 requires only one, and that SJVUAPCD requires up to three CMPs.

Response: Although ICAPCD focuses here on emissions from tillage, the deficiency in our proposed rule is related to requirements in Rule 806 for sources to implement one fewer CMP overall for on-field agricultural sources than is required by SJVUAPCD Rule 4550 and GBUAPCD Rule 502. Thus the fact that sources subject to SJVUAPCD Rule 4550 are not required to select two CMPs for reducing emissions from tillage is irrelevant. ICAPCD needs to assess whether additional CMPs for on-field agricultural sources are BACM for Imperial County.

ICAPCD has not established that the agricultural activities in Imperial County are significantly different from those in other areas. Accordingly, EPA believes that ICAPCD should have BACM level controls for both tillage and harvest emissions as do other areas with programs for emissions from agricultural

activities, and should consider SJVUAPCD and controls from other areas with analogous rules when assessing whether a requirement for additional CMPs would be economically and technologically feasible to control emissions from these activities. ICAPCD claims that implementing tillage CMPs may be more cost-effective in the San Joaquin Valley, but does not address whether it would be economically feasible to require additional CMPs in Imperial County.

We agree with Comite that sources subject to Arizona Rules 18-2-610 and 611 are required to implement two practices each from the "tillage and harvest" and "cropland" categories. ICAPCD needs to consider whether requiring four practices for on-field agricultural sources constitute BACM for Imperial County.

AL #6: Comite claims that Maricopa's inspection regime for agricultural sources is more rigorous than ICAPCD's.

Response: Comite provides no supporting information on either the Maricopa County or ICAPCD inspection program on which to base a response and we are not otherwise aware of information that supports this comment.

AL #7: The Farm Bureau agrees that SJVUAPCD requires an additional CMP from the "cropland-other" category but notes that the same requirement is found in ICAPCD's "land preparation and cultivation" and "harvest activities" categories. As a result, the Farm Bureau believes that including an additional category

would be redundant and onerous for participants.

Response: The deficiency identified in our proposed action is related to the requirement in Rule 806 for Imperial County sources to implement one fewer practice for on-field agricultural sources overall without a sufficient justification.¹⁵⁸ ICAPCD does not necessarily need to add a category to Rule 806 in order to address this deficiency. For example, depending on what is most appropriate for conditions in Imperial County, ICAPCD may be able to require that more than one CMP be implemented from the categories that currently exist in Rule 806. Moreover, it would not be redundant to require Imperial County sources to implement an additional CMP for on-field agricultural sources. Rule 806 has two categories for on-field agricultural sources, "land preparation and cultivation" and "harvesting," and requires sources to implement one practice from each category. As noted in Table 3 above, SJVUAPCD Rule 4550 and GBUAPCD Rule 502 have three categories for on-field agricultural sources, and require that sources implement one practice from each of these categories. Moreover, as noted in our response to comment AL #5 above, sources subject to Arizona Rules 18-2-610 and 611 are required to implement four practices for on-field agricultural sources. As part of a BACM analysis, ICAPCD should consider the economic and technological feasibility of requiring additional CMPs for on-

158 75 FR 8008, 8012.

field agricultural sources, including consideration of the requirements in rules adopted by SJVUAPCD, GBUAPCD and Arizona.

K. Agricultural Land Windblown Dust Controls (ALWD)

See Introduction in section II.I above.

ALWD #1: COLAB comments that the deficiencies identified by EPA related to windblown dust are particularly troublesome because they are so surprising. COLAB believes that Rule 806 exceeds CAA needs because windblown dust from agriculture is insignificant. Comite, on the other hand, notes SCAQMD's requirements for reducing windblown dust from active and inactive agricultural fields as BACM measures that ICAPCD should consider along with recommendations in U.S. Department of Agriculture's (USDA) National Agronomy Manual for reducing such dust.

Response: EPA has determined that windblown dust from agriculture is a significant PM₁₀ source category in Imperial County for which ICAPCD must demonstrate, but has not yet demonstrated, implementation of BACM level controls.¹⁵⁹ ICAPCD should include in its BACM analysis consideration of whether existing SCAQMD controls, among others, and USDA recommendations for controlling wind erosion, are economically and technologically feasible measures to reduce windblown dust from active and fallow agricultural fields. Also see response to comment General #3 above.

¹⁵⁹ Proposal TSD, pp. 10-11.

ALWD #2: ICAPCD believes that EPA should have concurred with exceptional event requests associated with high winds as discussed in the exceptional event comments above. As a result, ICAPCD believes that windblown dust from agricultural lands is not a significant source category in SIP development, and therefore not subject to BACM.

Response: In our proposed action on Regulation VIII, we explained how we determined that windblown dust from agricultural lands is a significant source category subject to BACM.¹⁶⁰ We have not received information in the comments or elsewhere that affects this conclusion or the related 2009 EE decision. See also responses to exceptional event comments above and comment OHV #1.

ALWD #3: ICAPCD disagrees that Rule 806 does not apply to fallow agricultural fields. ICAPCD states that there are no exemptions in Rule 806 for fallow fields and fallowing is an optional CMP to control emissions from "land preparation and cultivation" under Rule 806 section E.1.

Response: Fallowing land is defined in Rule 806 section C.16 as "Temporary or permanent removal from production. Eliminates entire operation/passes or reduces activities." We note that the fallowing CMP is an option under both the "land preparation and cultivation" category in section E.1 and the "harvesting" category in section E.2. While the fallowing CMP in Rule 806

¹⁶⁰ *Id.*, pp. 5-7.

section E.1 may reduce emissions from "land preparation and cultivation" and from "harvesting," it does not address any windblown dust emissions that may occur once a field is removed from production. EPA believes that the evaluation of BACM level controls for windblown dust from fallow fields should include consideration of USDA-approved conservation systems and activities.¹⁶¹

ALWD #4: ICAPCD comments that ICAPCD farms are all irrigated and historically well watered, which leads to stable clods and/or aggregates that lower susceptibility to wind erosion consistent with USDA's National Agronomy Manual. ICAPCD estimates that long-term irrigation reduces PM₁₀ emissions by 25-45% from the predominant cultivated soil types in Imperial County, so local fallow and active agricultural land is controlled for windblown emissions relative to land not previously used for irrigated agriculture. In contrast, ICAPCD believes that SCAQMD's farm acreage is overwhelmingly devoted to dryland grain farming, and EPA has not shown that SCAQMD controls are appropriate for ICAPCD's irrigated fields.

Response: Based on data in Table 4, EPA believes that the majority of ICAPCD harvested acreage is irrigated. However, EPA disagrees that farm acreage subject to SCAQMD controls is overwhelmingly devoted to dryland farming. See total harvested

¹⁶¹ *Id.*, pp. 10-11 and 17.

cropland acres and irrigated harvested cropland acres for Riverside County in Table 4. While historic irrigation may provide for some level of control, windblown dust from agriculture is a significant source, and ICAPCD is required to implement BACM level controls for windblown emissions from active and fallow agricultural fields. ICAPCD has not provided a convincing justification for why controls in the Coachella Valley Planning Area are not applicable to Imperial sources. ICAPCD's evaluation for BACM level controls for windblown dust from agricultural sources should include requirements in SCAQMD Rule 403 and the Coachella Valley Agricultural Handbook.

ALWD #5: ICAPCD notes that winds above 25 mph are extremely rare in the agricultural portion of Imperial Valley, and farmers usually avoid tilling on windy days to conserve soil. As a result, ICAPCD does not believe that SCAQMD's restriction for soil preparation and maintenance during days with winds above 25 mph would impact windblown dust emissions from agricultural fields in Imperial County. In contrast, Comite points to SCAQMD's requirements as potential BACM that ICAPCD has not properly considered.

Response: ICAPCD must analyze and implement BACM for agricultural windblown dust emissions.¹⁶² Such analysis may consider whether a restriction on tilling activities on days with

¹⁶² Proposal TSD, pp. 5-7.

winds above 25 mph is appropriate in Imperial County pursuant to our guidance.¹⁶³ However, ICAPCD has not provided such analysis in the Regulation VIII submittal, its comments or elsewhere. To the extent that farmers avoid tilling on windy days to conserve soil anyway, this restriction would not seem to be onerous.

ALWD #6: ICAPCD comments that SCAQMD's only additional requirement for active fields besides the restriction on tilling on days with winds above 25 mph is to implement one more CMP from a list that includes minimum tillage. ICAPCD believes this CMP is not directly effective at reducing windblown emissions, and hence ICAPCD believes that by EPA's own reasoning, this requirement does not require windblown control on active fields in the South Coast Basin.

Response: ICAPCD has not explained why minimum tillage would not directly reduce windblown dust from active fields. EPA expects that minimum tillage would reduce windblown emissions by maintaining more plant residue on the field than conventional tillage. Establishing and maintaining land cover is one of the five principles noted in the National Agronomy Manual for wind erosion control.¹⁶⁴

ALWD #7: Comite believes that more specificity and information must be provided concerning IID's Fallowing Program

¹⁶³ General Preamble Addendum at 42013.

¹⁶⁴ See p. 502-17 of the USDA NRCS *National Agronomy Manual*, October 2002.

to ensure that emission reductions from it are quantifiable, verifiable and enforceable.

Response: ICAPCD must analyze and implement BACM for agricultural windblown dust emissions.¹⁶⁵ If, as a result of this analysis, ICAPCD concludes that IID's Fallowing Program is needed to implement BACM, then we agree that ICAPCD needs to provide more information about IID's program and ensure that controls that are provided through the program are enforceable.

ALWD #8: Regarding EPA concerns with agricultural windblown dust controls, ICAPCD and the Farm Bureau note that Rule 806 was modeled after EPA-approved SJVUAPCD Rule 4550 at EPA's recommendation.

Response: EPA's guidance provides that BACM is determined on a case-by-case basis and can consider the specific conditions of the nonattainment area.¹⁶⁶ When we approved SJVUAPCD Rule 4550, we did not believe that SJVUAPCD had a regular and repeated windblown dust problem.¹⁶⁷ However, ICAPCD asserts in its 2009 PM₁₀ Plan that the "overwhelming majority of airborne PM in Imperial County is primary PM. The major source of primary PM is fugitive windblown dust..."¹⁶⁸ Moreover, ICAPCD's 2009 PM₁₀ Plan discusses how the flat terrain of Imperial Valley and strong temperature differentials produce moderate winds and how Imperial

¹⁶⁵ Proposal TSD, pp. 5-7.

¹⁶⁶ See General Preamble Addendum at 42010 and 42012.

¹⁶⁷ See, e.g., 73 FR 14687, 14693 (March 19, 2008).

County occasionally experiences high winds with speeds greater than 30 mph in April and May. In addition, the 2009 PM₁₀ Plan attributes monitored exceedances in September and June to high winds.¹⁶⁹ As a result, EPA believes that ICAPCD must consider windblown dust controls for agricultural sources. Also, see responses to comments General #3 and EE #5.

ALWD #9: The Farm Bureau notes that both Rule 806 and the "Agricultural Air Quality Conservation Management Practices for Imperial Valley" were developed consistent with rules adopted in other areas and EPA recommendations. As a result, the Farm Bureau believes that this ensured Rule 806 was adequate.

Response: See response to comment General #3.

L. Other Controls (OC)

OC #1: Comite believes Regulation VIII should be further strengthened by removing director's discretion in Rule 802 section D.1, and removing the exemption in Rule 802 section D.4. ICAPCD objects to EPA's concerns regarding Rule 802 section D.1 because: (1) the APCO's discretion is limited to a determination of whether any of the controls in sections F.1 through F.3 can be implemented to satisfy the 20% opacity and stabilized surface requirements; (2) where a SIP-approved rule provides APCO discretion, the APCO can exercise the discretion without further SIP-approval; and (3) EPA has final enforcement authority for

168 2009 PM₁₀ SIP, p. 1-1.

SIP-approved rules.

Response: EPA believes that the director's discretion provisions in Rule 802 are generally not acceptable under the CAA. Regarding ICAPCD's first argument, Rule 802 section D.1 provides the APCO discretion to waive completely the opacity and stabilized surface requirements without limiting discretion either by a procedure that the APCO must use (e.g., test method X) or by boundaries to the discretion (e.g., up to 30% opacity instead of 20% opacity). Thus, the discretion is not "limited."

Regarding ICAPCD's second argument, we note initially that EPA has a long history of rejecting such broad APCO discretion in SIP rules.¹⁷⁰ Moreover, we limit such discretion precisely because the APCO can exercise it without further SIP approval where a SIP-approved rule provides APCO discretion.

Regarding ICAPCD's third argument, while we can enforce SIP-approved rules, as stated, director's discretion provisions undermine their enforceability because enforcement of the rules are constrained by their terms. In this case, EPA or others could be restricted in enforcing against activity exempted by the APCO if this provision were SIP-approved.

While we share Comite's concerns with Rule 802 section D,

169 2009 PM₁₀ SIP, pp. 1-3 and 2-4.

170 See, e.g., "Guidance Document for Correcting Common VOC and Other Rule Deficiencies," U.S. EPA Region IX, August 21, 2001 (the Little Bluebook); and "Issues Relating to VOC Regulation

our limited disapproval with respect to Rule 802 section D will not trigger sanctions or a FIP obligation because Rule 802 does not address a source category identified as significant and thus requiring BACM at this time. Therefore our limited disapproval will not trigger sanctions under CAA section 179 or a FIP obligation under section 110(c) with respect to bulk materials regulated by Rule 802. However, should regulation of bulk materials be subject to the BACM requirement in the future or to meet other SIP planning requirements under CAA title I, part D such as reasonable further progress or attainment, the APCO discretion in Rule 802 section D.1 or the exemptions in Rule 802 section D.4 could result in such consequences and/or affect the emission reduction credit for the rule.

M. Statutory and Executive Order Reviews (SEO)

SEO #1: OWD believes that EPA should address Executive Order 12898, which requires federal agencies to identify and address disproportionately adverse health or environmental impacts on minority and low-income populations. Specifically, OWD believes that EPA's action may impact Imperial County's Hispanic and low-income population by reducing tourist income from OHV users. In contrast, Comite applauds the commitment of the Regional Administrator of EPA Region 9 to environmental justice principles, and notes that relatively large portions of the

population in this area are not only Hispanic and poor, but are also suffering from poor health and this is exacerbated by air pollution problems in this area.

Response: EPA agrees it is important to consider environmental justice in our actions and we briefly addressed environmental justice principles in our proposal TSD.¹⁷¹ Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States. The Executive Order has informed the development and implementation of EPA's environmental justice program and policies. Consistent with the Executive Order and the associated Presidential Memorandum, the Agency's environmental justice policies promote environmental protection by focusing attention and Agency efforts on addressing the types of environmental harms and risks that are prevalent among minority, low-income and Tribal populations.

25, 1998 (The Bluebook).

This action will not have disproportionately high and adverse human health or environmental effects on minority, low-income or Tribal populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. Specially, EPA's limited approval and limited disapproval of Regulation VIII would have the affect of strengthening environmental requirements throughout ICAPCD, and would not relax environmental requirements in any area. Thus it promotes environmental justice by increasing the level of human health and environmental protection for an area where, as the commenters note, relatively large portions of the population are low income and/or minority.

SEO #2: OWD notes that EPA's action may be subject to NEPA evaluation.

Response: EPA actions under the CAA are exempt from NEPA.¹⁷²

SEO #3: OWD believes that EPA should address increased management costs for Imperial County's OHV recreation areas and the effects on OHV areas outside Imperial County. As a result, OWD does not believe that EPA has a basis to claim (regarding the Unfunded Mandates Reform Act), that no additional costs result from this action.

171 Proposal TSD, p. 3.

Response: As explained in our proposal, our action would approve and disapprove pre-existing requirements under State or local law, and impose no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.¹⁷³

III. EPA Action

No comments were submitted that change our assessment of Regulation VIII as described in our proposed action. Therefore, as authorized in sections 110(k)(3) and 301(a) of the Act, EPA is finalizing a limited approval of the submitted rules. This action incorporates the submitted rules into the California SIP, including those provisions identified as deficient. As authorized under section 110(k)(3), EPA is simultaneously finalizing a limited disapproval of the rules. As a result, sanctions will be imposed in Imperial County unless EPA approves subsequent SIP revisions that correct the rule deficiencies within 18 months of the effective date of this action. These sanctions will be imposed under section 179 of the Act according to 40 CFR 52.31. In addition, EPA must promulgate a federal implementation plan (FIP) under section 110(c) unless we approve subsequent SIP revisions that correct the rule deficiencies within 24 months. Note that the submitted rules have been adopted by ICAPCD, and EPA's final limited disapproval does not

¹⁷² See 40 CFR 6.101(b).

prevent the local agency from enforcing them.

IV. Statutory and Executive Order Reviews

A. Executive Order 12866, Regulatory Planning and Review

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled "Regulatory Planning and Review."

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* Burden is defined at 5 CFR 1320.3(b).

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

This rule will not have a significant impact on a substantial number of small entities because SIP limited approvals and limited disapprovals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply approve and disapprove requirements that

the State is already imposing. Therefore, because this limited approval and limited disapproval action does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities.

Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of State action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. Union Electric Co., v. U.S. EPA, 427 U.S. 246, 255-66 (1976); 42 U.S.C. 7410(a)(2).

D. Unfunded Mandates Reform Act

Under sections 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate; or to the private sector, of \$100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for

informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the limited approval and limited disapproval action promulgated does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action approves and disapproves pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

E. Executive Order 13132, Federalism

Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." Under Executive Order 13132, EPA may not

issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, because it merely approves and disapproves State rules implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

F. Executive Order 13175, Coordination with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process

to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” This final rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes. Thus, Executive Order 13175 does not apply to this rule.

G. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. This rule is not subject to Executive Order 13045, because it approves State rules implementing a Federal standard.

H. Executive Order 13211, Actions that Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use “voluntary consensus standards” (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

The EPA believes that VCS are inapplicable to this action. Today’s action does not require the public to perform activities conducive to the use of VCS.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States. The

Executive Order has informed the development and implementation of EPA's environmental justice program and policies. Consistent with the Executive Order and the associated Presidential Memorandum, the Agency's environmental justice policies promote environmental protection by focusing attention and Agency efforts on addressing the types of environmental harms and risks that are prevalent among minority, low-income and Tribal populations.

This action will not have disproportionately high and adverse human health or environmental effects on minority, low-income or Tribal populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. Specially, EPA's simultaneous limited approval and limited disapproval of Regulation VIII would have the affect of strengthening environmental requirements throughout ICAPCD, and would not relax environmental requirements in any area.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. section 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the

Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. section 804(2). This rule will be effective on [FEDERAL REGISTER OFFICE: insert date 30 days from date of publication of this document in the Federal Register].

L. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [FEDERAL REGISTER OFFICE: insert date 60 days from date of publication of this document in the Federal Register]. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control,
Incorporation by reference, Intergovernmental relations,
Particulate matter, Reporting and recordkeeping requirement.

June 15, 2010
Dated:


Jared Blumenfeld
Regional Administrator,
Region IX.

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 52 [AMENDED]

1. The authority citation for Part 52 continues to read as follows:

AUTHORITY: 42 U.S.C. 7401 et seq.

Subpart F - California

2. Section 52.220 is amended by adding paragraphs (c) (345) (i) (E) to read as follows:

§52.220 Identification of plan.

* * * * *

(c) * * *

(345) * * *

(i) * * *

(E) Imperial County Air Pollution Control District

(1) Rule 800, "General Requirements for Control of Fine Particulate Matter (PM-10)," adopted on October 10, 1994, revised on November 25, 1996 and revised on November 8, 2005.

(2) Rule 801, "Construction & Earthmoving Activities," Rule 802, "Bulk Materials," Rule 803, "Carry-Out & Track-Out," Rule 804, "Open Areas," Rule 805, "Paved & Unpaved Roads," Rule 806, "Conservation Management Practices," adopted on November 8, 2005.

* * * * *

FUEL to BURN

**THE CLIMATE AND PUBLIC HEALTH IMPLICATIONS OF
OFF-ROAD VEHICLE POLLUTION IN CALIFORNIA**



A CENTER FOR BIOLOGICAL DIVERSITY REPORT

Fuel to Burn: The Climate and Public Health Implications of Off-road Vehicle Pollution in California

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May 2008

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Front Cover:
Motorcycle in Jawbone Canyon, California
Photo by Howard Wilshire



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The Center for Biological Diversity is a national nonprofit conservation organization with more than 40,000 members dedicated to the protection of endangered species and wild places. We work through science, law, and creative media to secure a future for all species, great or small, hovering on the brink of extinction.

The Clean Air Initiative, a project of the American Lung Association of San Diego & Imperial County, is dedicated to improving the air quality and health of residents in Imperial County and the Mexicali border region through education, advocacy, and support. The Clean Air Initiative coalition members include health care agencies, nonprofit organizations, environmental agencies, and Imperial Valley community members.

Contact: Chris Kassar, ckassar@biologicaldiversity.org

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Executive Summary

In 2006, California took a giant leap forward in addressing the threats posed by global climate change by passing landmark legislation, the Global Warming Solutions Act. Under this law, the state commits to reducing its emissions of greenhouse gases to 1990 levels by the year 2020 — a reduction of approximately 29 percent compared to the projected business-as-usual scenario. In addition, Governor Schwarzenegger's Executive Order S-3-05 commits the state to reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. Currently, the California Air Resources Board is crafting rules to achieve the new greenhouse gas emission reductions targets.

As described below, because off-road vehicles produce significant greenhouse gases, California should ensure that emissions from this source are reduced at the same pace as other sources. At a minimum, emissions from off-road vehicles should be reduced to at least 1990 levels by 2020 with further reductions to 80 percent below 1990 levels by 2050.

The state has also made a commitment to protecting the quality of the air that California residents breathe. California has among the poorest air quality in the nation and is home to 13 of 20 counties nationwide most at risk to adverse health impacts from smog.

In addressing the twin goals of reducing greenhouse gas emissions and protecting public health from the adverse effects of poor air quality, California needs to immediately address the pollution and greenhouse gas emissions from off-road vehicles. These emissions, while a relatively small component

of the overall transportation sector, are a significant and growing source of greenhouse gases. Due to the meteoric rise in the number of off-road vehicles, these emissions will climb significantly if steps are not taken to curb them.

Off-road vehicles in California currently emit more than 230,000 metric tons — or 500 million pounds — of carbon dioxide into the atmosphere each year. This is equivalent to the emissions created by burning 500,000 barrels of oil. The 26 million gallons of gasoline consumed by off-road vehicles each year in California is equivalent to the amount of gasoline used by 1.5 million car trips from San Francisco to Los Angeles.

The gas used annually by California off-road vehicles equals that used in 1.5 million car trips between San Francisco and Los Angeles.

Because of the significant pollution caused by off-road vehicles, a reduction in emissions will have important health benefits for Californians. Off-road vehicles emit considerably more pollution than automobiles. According to the California Air Resources Board, off-road motorcycles and all-terrain vehicles produce 118 times as

much smog-forming pollutants as do modern automobiles on a per-mile basis.

In the past 15 years, pollution from off-road vehicle use has increased significantly. Emissions of total organic gases and reactive organic gases — which are important precursors to smog — have doubled. Carbon monoxide emissions have increased by 56 percent. Emissions from current off-road vehicle use statewide are equivalent to the carbon dioxide emissions from 42,000 passenger vehicles driven for an entire year or the electricity used to power 30,500 homes

for one year. If left unchecked, the emissions from off-road vehicles will continue to increase; as California addresses the difficult problems posed by global warming, emissions from off-road vehicles must be addressed.

This pollution is having a significant impact on the health of Californians. Imperial County, for example, is one of the most popular off-road vehicle recreation destinations in the state. It also has among the worst air quality in California. Childhood asthma rates in Imperial County are far higher than the statewide average. Air pollution is a contributor to the high rates of asthma, bronchitis, pneumonia, and allergies in this region, especially among children younger than 14 years old.

Despite these serious climate and health implications, the State of California has failed to seriously address the greenhouse gas emissions and pollution associated with off-road vehicle recreation. The California Air Resources Board currently allows the continued sale and use of polluting off-road vehicles that do not meet state emissions standards. And the Department of Parks and Recreation spends tens of millions of dollars each year promoting and supporting off-road vehicle use on state and federal public lands.

The significant reduction in greenhouse gas emissions mandated by the Global Warming Solutions Act applies to all greenhouse gas sources throughout the state. However, not all sources are able to realize reductions to the same degree at the same economic and societal costs. Because



Dusty trail in dirt-bike and all-terrain vehicle park. Dust, a component of particle air pollution, makes unpaved roads the largest single source of particulate matter.

Photo by Laurel Hagen

recreational off-road vehicle use is entirely discretionary, emissions reductions in this source to levels at or significantly below 1990 levels may be used to offset other sources that are less discretionary or that involve higher costs. For the policy recommendations below, we urge the Air Resources Board to assess the benefits of using each policy mechanism to achieve much greater reductions in this source. In all cases, a reduction to 1990 levels by 2020 should be considered only as the minimum reduction alternative.

Limiting overall off-road vehicle emissions will ensure that recreational polluters are reducing emissions at the same pace as other sectors of the population. Consistent with Assembly Bill 32 and the governor's executive order, emissions from off-road vehicles should be reduced to at least 1990 levels by 2020 with further reductions to 80 percent below 1990 levels by 2050. In order to meet this target, we offer the following recommendations:

- **The California Air Resources Board, in cooperation with the Department of Parks and Recreation, should limit greenhouse gas emissions from off-road vehicle use in state vehicular recreation areas and other state lands to at least 1990 levels.**

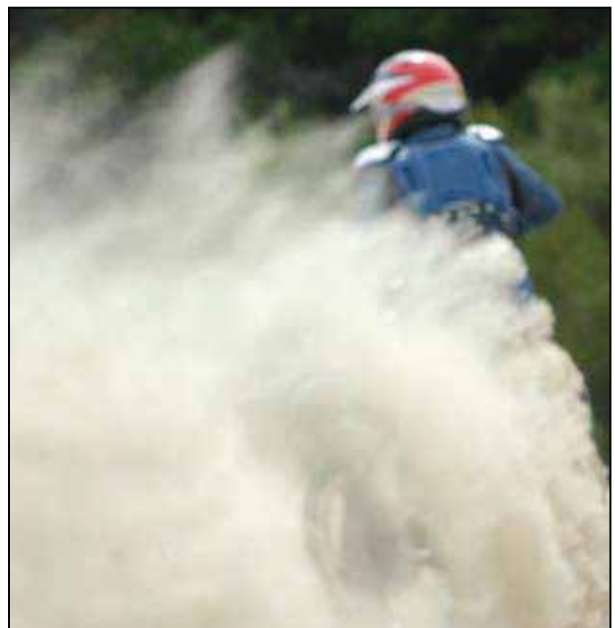
The Department of Parks and Recreation should develop a statewide plan to reduce statewide off-road vehicle emissions to the maximum extent possible. The plan should include options to reduce greenhouse gas emissions from discretionary recreational off-road vehicle use to at least 1990 levels by 2020. No new state off-road vehicle sites should be established unless they are consistent with such a plan. An initial analysis of the amount of greenhouse gases currently being emitted from off-road vehicle use within state vehicular recreation areas and other state lands is crucial in developing a statewide plan and individual management plans to reduce off-road vehicle emissions from these areas.

- **The State of California should ensure that federal agencies managing off road recreation in California are limiting greenhouse gas emissions from off-road vehicles to at least 1990 levels and should withhold financial support and permits from federal agencies that do not meet this target.**

Because significant greenhouse gas emissions arise from off-road vehicle use on federal lands, the State of California must ensure that those emissions are reduced along with emissions from other sources. This means that:

- o *The California Air Resources Board should reject applications for continued or expanded off-road vehicle use by federal agencies that are not reducing emissions.*

The California Air Resources Board should adopt rules that require rejection of applications for new, continued, or expanded off-road vehicle recreation on federal lands from federal agencies or districts that do not have an adequate plan to reduce overall off-road vehicle emissions from their jurisdiction to at least 1990 levels.



Off-road motorcycle sending up a cloud of dust

Photo by George Wuerthner

o The Department of Parks and Recreation should reject applications for funding from federal agencies that are not reducing emissions.

The California Department of Parks and Recreation provides tens of millions of dollars to federal agencies to promote and manage off-road vehicle recreation. The Off-Highway Motor Vehicle Recreation Division should adopt rules that disallow applications for funding from federal agencies or districts that do not have a sufficient plan to reduce overall off-road vehicle emissions from their jurisdiction to at least 1990 levels.

o The State of California should provide substantive comments on federal land-use plans and proposals that will result in increased greenhouse gas emissions.

The State of California has several opportunities to significantly reduce greenhouse gas emissions from off-road vehicle use on federal lands. The California Air Resources Board, the state, and appropriate state agencies should participate in the public planning process for proposed federal land management plans, travel management plans, and individual projects to actively promote the position that each plan or project must be consistent with an overall plan by the federal land management agency to reduce off-road vehicle emissions to the maximum extent possible. Such plans should include options to reduce greenhouse gas emissions from discretionary recreational off-road vehicle use to, at a minimum, 1990 levels by 2020.



Off-road vehicle destruction in the Mojave Desert. Besides creating ugly tracks like these, California off-road vehicles together emit as much carbon dioxide as 42,000 passenger vehicles driven for a year.

Photo by Perry Hoffman

- **The Department of Motor Vehicles should cap the number of registrations issued for off-road vehicles in California.**

The Department of Motor Vehicles should cap the number of registrations issued for off-road vehicles in California. The cap should be scaled to achieve, at least, a reduction of emissions to 1990 levels by 2020. Because registration enforcement is currently lax, additional resources may be required for effective enforcement.

Also, the California Air Resources Board should immediately address the adverse public health effects and climate implications of non-conforming off-road vehicles.

- **The California Air Resources Board should eliminate loopholes that allow continued use of polluting off-road vehicles that fail to meet state emission standards.**

Just as California does not allow the continued use of automobiles that do not meet state emission standards, the state should not allow the use of off-road vehicles that do not comply with state standards. The California Air Resources Board should eliminate the “red-sticker” loophole that allows continued use of polluting off-road vehicles.

- **The California Air Resources Board should disallow continued or expanded off-road vehicle use on federal lands in areas that do not meet air quality standards.**

California must certify that proposed land uses on federal lands conform to the state’s enforcement of the Clean Air Act. To date, the state regularly approves these uses — even in non-conforming areas like Imperial County — without significant evaluation. The California Air Resources Board should reject proposals to continue or expand off-road vehicle use on federal lands in areas that do not meet air quality standards.



Dust plume from off-road vehicle staging. Meeting California’s ambitious goals of reducing greenhouse gas emissions means that *all* emissions sources must be addressed.

Photo courtesy Community ORV Watch

Global Climate Change: Overall Impacts and California's Response

In 2007, the Intergovernmental Panel on Climate Change once again warned that human-induced global warming is already causing physical and biological impacts worldwide.¹ Global temperatures have already risen by 0.74°C (1.3°F) over the past century, and the rate of warming in the last 50 years was nearly double the rate observed over the last 100 years.² Temperatures are certain to go up even further in the future, and the most recent scientific work demonstrates that climate changes are occurring earlier and more quickly than expected.

Fossil fuel combustion is producing a critical mass of greenhouse gases that has already shifted the planet's climate system into new and dangerous territory. The impacts of this shift are already apparent and are predicted to intensify.

On a global level, we are seeing and will continue to see increases in average air and ocean temperatures, widespread melting of snow and ice, and rising mean sea levels. On continental, regional, and ocean-basin scales, numerous long-term changes in climate have also been observed. These include loss of Arctic ice and habitat, loss of Antarctic ice, melting of glaciers and related glacial-lake outburst flows, loss of snowpack in California and elsewhere, changes in precipitation patterns, increased hurricane intensity, sea-level rise and coastal flooding, public health harms such as increased heat-related illness and smog, harm to habitats, widespread species extinction, and the potential for substantial social upheaval

resulting from significant environmental changes. Further, there will continue to be warming due to the amount of heat-trapping greenhouse gases already in the air, even if we completely stop new emissions immediately.³

What does this temperature change mean for California? The California Climate Change Center has evaluated the present and potential future impacts of climate change to the state and demonstrated that climate change poses enormous risks to California.⁴ Predicted impacts to the Golden State include:

Very few species will escape the burn of climate change. A landmark study surveying 20 percent of the Earth's land area offered a stark prediction: 35 percent of species will be committed to extinction by the year 2050 if greenhouse gas emission trends continue.*

- A six- to 30-inch rise in sea level, leading to increased coastal flooding.
- A 200- to 400-percent increase in the number of heat-wave days in major urban centers.
- An increase of up to 53 percent in wildfire risk.
- An increase in storm intensity, precipitation, and the proportion of precipitation as rain versus snow.

- A 30- to 90-percent reduction of the Sierra snowpack during the next 100 years, as well as earlier melting and increased runoff.
- An increase in the number of days conducive to ozone (O₃) formation.
- Profound, and potentially catastrophic, impacts to ecosystems and species, including changes in the timing of life events, shifts in range, and community-abundance shifts.⁵

*C.D.C Thomas et al., "Extinction risk from climate change," *Nature* 427 (2004):145-148.

Curbing greenhouse gas emissions to limit the effects of climate change in California and the world is one of the most urgent challenges of our generation. Recent peer-reviewed works emphasize the urgent need to reduce greenhouse gas emissions immediately: Just ten more years of “business-as-usual” emissions may commit us to climate feedbacks and impacts that would entirely transform the planet as we now know it.⁶ As noted in a report commissioned by the California Environmental Protection Agency:

Because most global warming emissions remain in the atmosphere for decades or centuries, the choices we make today will greatly influence the climate our children and grandchildren inherit. The quality of life they experience will depend on if and how rapidly California and the rest of the world reduce greenhouse gas emissions.⁷

In response to this monumental threat, in 2006, the California legislature passed the Global Warming Solutions Act, known as Assembly Bill 32, which requires the state air resources board to limit statewide greenhouse gas emissions by 2020 to 1990 levels.⁸ Assembly Bill 32 recognizes California’s leadership in furthering environmental protection. Despite leading the nation in energy efficiency, the state of California — compared to entire nations — remains the 12th-largest emitter of greenhouse gases worldwide.

Under Assembly Bill 32, the California Air Resources Board must establish rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions from any “greenhouse gas emission source.” This is defined in the statute as any “source, or category of sources, of greenhouse gas emissions whose emissions are at a level of significance, as determined by the state board, that its participation in the program established under this division will enable the state board to effectively reduce greenhouse gas emissions

and monitor compliance with the statewide greenhouse gas emissions limit.”¹⁰

The California Air Resources Board is currently in the process of crafting the rules and regulations in an effort to meet its goal of cutting greenhouse gas emissions to 1990 levels by 2020. This will require an approximately 29-percent reduction from a business-as-usual approach.

A primary focus of efforts to curb greenhouse gas emissions is likely to remain on passenger vehicles, which includes the sedans, trucks, sport utility vehicles, and mini-vans that most of us drive to work, school, or the grocery store every day. But while passenger vehicles contribute the majority of greenhouse gas emissions, off-road vehicles emit the same greenhouse gases as passenger vehicles and have even more detrimental impacts on human health. Limiting off-road vehicle emissions will help the state meet its goal of reducing greenhouse gas emissions while simultaneously protecting public health. Regulation of emissions from off-road vehicles must be a priority for the California Air Resources Board as it implements Assembly Bill 32.



Dust from off-road vehicles. Off-road vehicle dust can disperse harmful air contaminants well beyond a designated off-road vehicle-use area.

Photo by Kevin Emmerich

The Significant Greenhouse Gas Emissions of California Off-road Vehicles

In 2006, the Off-Highway Motor Vehicle Recreation Division of California's Department of Parks and Recreation commissioned a survey to estimate fuel usage by off-road recreation in California.¹¹ The survey concluded that overall use of off-road vehicles on public lands consumes more than 26 million gallons of gasoline each year in California (Figure 1).¹² This equates to more than 500,000 barrels of oil. The gasoline consumption from off-road vehicle use in California is equivalent to the gasoline consumed by more than 1.5 million passenger vehicles driving from San Francisco to Los Angeles.¹³

Figure 1. Estimated Gallons of Gasoline Used by Off-road Vehicles on Public Lands in California, April 2004 – March 2005

VEHICLE TYPE*	MEAN	LOWER BOUND	UPPER BOUND
Registered off-road vehicles	20,014,590	17,081,031	22,948,148
Illegal, unregistered off-road vehicles	6,207,327	4,186,151	8,218,148
Total	26,221,917	21,267,182	31,166,650

Source: California Department of Parks and Recreation, *Estimating the State Fuel Tax Paid on Gasoline Used in the Off-highway Operation of Vehicles for Recreation*, September 2006

***Registered off-road vehicles** include dirt bikes, all-terrain vehicles, snowmobiles, and dune buggies that have been legally registered with the state.

Illegal, unregistered off-road vehicles include dirt bikes, all-terrain vehicles, snowmobiles, and dune buggies that

The Environmental Protection Agency standard estimation is approximately 8,800 metric tons of carbon dioxide from each million gallons of gasoline burned.¹⁴ By this estimate, annual emissions from California off-road vehicle use equal 230,000 metric tons of carbon dioxide. This equates to more than 500 million pounds of carbon dioxide emissions each year. Emissions from current off-road vehicle use statewide are equivalent to the carbon dioxide emissions from 42,000 passenger vehicles driven for an entire year or the electricity used to power 30,500 homes for one year.

Worse, the figure used here does not include emissions from travel to and from off-road vehicle recreation sites, which is likely substantial. According to a comprehensive survey of recreation in California, the mean travel time to a recreation area is 45 minutes.¹⁵ Many off-road vehicle recreation sites are remote from urban population centers, leading to even longer travel times. Further, the trucks used to tow off-road vehicles often have very low fuel efficiency, leading to increased emissions. When emissions from travel to and from off-road vehicle recreation sites are considered, total greenhouse gas emissions from off-road recreation are likely to be much higher.

In addition, off-road vehicle recreation consumes 5.5 million gallons of diesel fuel each year,¹⁶ and although diesel engines are generally more fuel efficient than gasoline

Figure 2. Annual Recreational Gasoline Usage by Vehicle Type

VEHICLE TYPE	GALLONS OF FUEL USED
Off-road motorcycles	10,003,506
Off-road all-terrain vehicles	12,013,896
Off-road four-wheel vehicles	2,658,841
Snowmobiles	1,444,087
Other off-road vehicles	101,585
Total gasoline usage	26,221,915

Source: California Department of Parks and Recreation, *Estimating the State Fuel Tax Paid on Gasoline Used in the Off-highway Operation of Vehicles for Recreation*, September 2006

engines, they emit 25 to 400 times the amount of particulate black carbon and organic matter (soot) than gas-burning vehicles.¹⁷ The warming from soot may offset any benefits from reduced carbon dioxide emissions, and scientists have increasingly focused on the need to control black carbon in conjunction with carbon dioxide reductions in order to slow global warming.¹⁸

The Continued Growth of Off-road Vehicle Emissions in California

Transportation is the largest single contributor of greenhouse gases in California, accounting for 38 percent of the state's total greenhouse gas emissions.¹⁹ Off-road vehicle emissions account for a small but significant fraction of the state's overall greenhouse gas emissions, and emissions from this sector, if left unchecked, will continue to grow.



Motorcycle ascending scarred hillside in Jawbone Canyon, California. California off-road motorcycles together release more emissions than all other types of off-road vehicles in the state.

Photo by Howard Wilshire

Because only a small fraction of the population — about 15 percent — participates in off-road vehicle recreation, reductions in use will have no impact on a majority of Californians.²⁰ And because recreational off-road vehicle use is entirely discretionary, reductions in this source to levels at or significantly below 1990 levels may be used to offset other sources that are less discretionary or that involve higher costs. In a survey of Californians, walking was the activity with the highest participation percentage (91 percent) and trail hiking ranked ninth out of 55 (69 percent), while driving four-wheel-drive vehicles ranked 31st (19 percent) and riding all-terrain vehicles and dirt bikes ranked 38th (17 percent).²¹

Finally, as described in greater detail below, reducing greenhouse gas emissions from off-road vehicles will have important public health benefits for all Californians. It is only fair that reductions in emissions associated with an optional recreational pursuit contribute towards meeting the state's greenhouse gas emissions reductions targets. Meeting the state's ambitious goals of reducing greenhouse gas emissions means that all emissions sources must be addressed, and the Air Resources Board must acknowledge this fact by addressing the emissions associated with off-road vehicles.



Motorcycle in dune recreation area. Off-road motorcycles released an astounding average of 143 tons of emissions per day in 2006. (California Air Resources Board, <http://www.arb.ca.gov/app/emssinv/emssumcat.php>.)

Photo by George Wuerthner

Reducing Off-road Emissions by Reducing Overall Usage

There are currently no regulations directly addressing the greenhouse gas emissions of off-road vehicles in California. In 2002, the United States Environmental Protection Agency issued final regulations setting new standards for emissions from off-road vehicles and snowmobiles.²² However, this rule focused on carbon monoxide, nitrogen oxides, and volatile organic gases, and did not regulate greenhouse gas emissions. In 2004, the California Air Resources Board adopted regulations to comply with Assembly Bill 1493, California's Clean Vehicle Law, which commits the state to achieving the maximum feasible and cost-effective reduction of greenhouse gas emissions from passenger cars and light trucks sold in California. However, the Bush administration has so far blocked these regulations by refusing to provide Environmental Protection Agency approval. Most recently, the State of California petitioned the federal government for rule-making to address the greenhouse gas emissions from all non-road vehicles, including off-road vehicles,²³ but the Bush Administration is not expected to act on this petition.

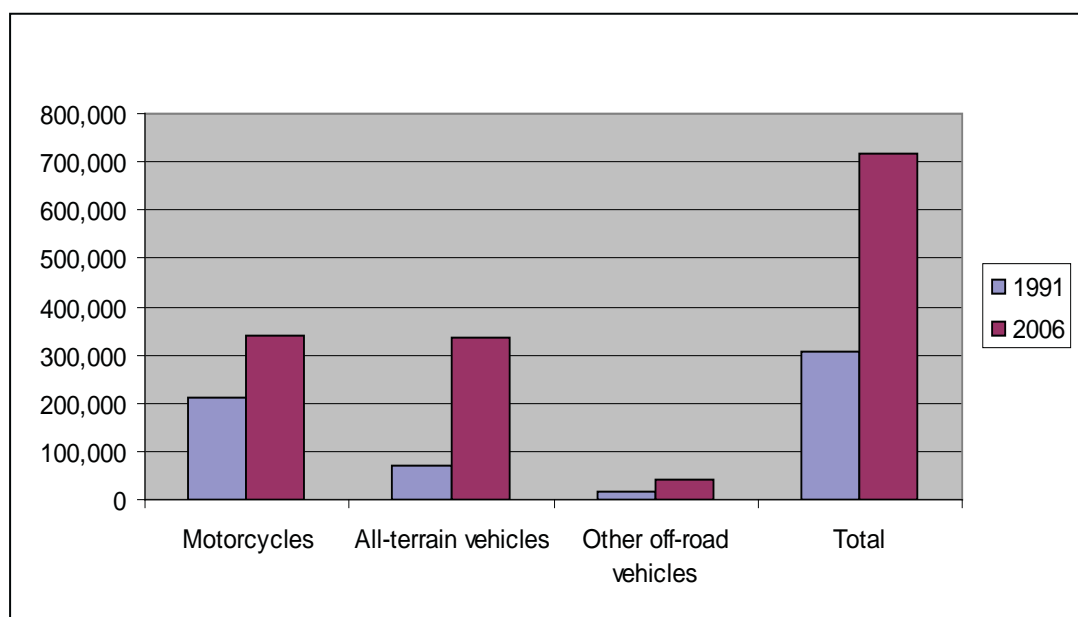


Dust plume from off-road vehicle staging near public lands. Evidence shows that coarse particle pollution, most associated with off-road vehicles, is detrimental to human health.

Photo courtesy Community ORV Watch

While more efficient vehicles would produce less greenhouse gas per miles traveled, efforts to increase efficiency would generally apply only to new vehicles and would therefore fail to address the greenhouse gas emissions of all of the off-road vehicles already in use in California. At the same time, the use of off-road vehicles in California continues to increase. Registrations of all-terrain vehicles, snowmobiles, dune buggies, sand rails, and dirt bikes in California have more than doubled in the last 20 years.²⁴ In addition, there has been a 74-percent increase in street-licensed four-wheel-drive vehicles in California since 1994, and a more than 60-percent increase in the sale of sport-utility vehicles in the state from 1996 to 2002 (Figure 3).²⁵ Furthermore, California contains more than 1.1 million legally registered and illegal, unregistered off-road vehicles, and millions more sport-utility vehicles and motorcycles that are driven off road.²⁶

Figure 3. Increase in Off-road Vehicle Registration, 1991-2006



Source: California Department of Parks and Recreation, *Estimating the State Fuel Tax Paid on Gasoline Used in the Off-Highway Operation of Vehicles for Recreation*, ICF International, September 2006, at 5-20; Memorandum from Department of Transportation to State Controller's Office, June 9, 1992

All told, the large number of off-road vehicles already in use in California, coupled with the expected increase in the number of users, makes it highly unlikely that higher efficiency requirements for new off-road vehicles alone could bring about a decrease in greenhouse gases. In addition, considering the ongoing political obstacles to regulations to increase vehicle efficiency, efforts to reduce greenhouse gas emissions from off-road vehicles as a group must focus on measures to limit their use and proliferation.

The Serious Public Health Effects of Off-road Vehicle Emissions

Off-road vehicles are typically powered by two-stroke engines that are highly inefficient and produce relatively high emissions of gases that harm the environment and can adversely affect human health.²⁷ The pollutants released in off-road vehicle exhaust include carbon monoxide, ozone, hydrocarbons, oxides of nitrogen and sulfur, and particulate matter.²⁸ Kasnitz and Maschke report: “One two-stroke off-road motorcycle or all-terrain vehicle emits as much hydrocarbon pollution per mile as 118 passenger cars, while relatively cleaner four-stroke engines still emit more than seven times the level of carbon monoxide as new cars.”²⁹ Other studies report similar results.³⁰

According to the Environmental Protection Agency, recreational vehicles account for nearly 10 percent of national mobile-source hydrocarbon emissions and about 3 percent of national mobile-source carbon monoxide emissions. If left uncontrolled, by 2020, these engines will contribute 33 percent of national mobile source hydrocarbon emissions, 9 percent of carbon monoxide emissions, 9 percent of oxides of nitrogen emissions, and 2 percent of particulate matter emissions.³¹



Dirt bike in all-terrain vehicle park. On an hour-by-hour basis, a motorcycle can emit as much pollution as more than 30 automobiles.

Photo by Laurel Hagen

On an individual basis, these vehicles have very high pollution rates. A two-stroke all-terrain vehicle or motorcycle can emit as much pollution (hydrocarbons, carbon monoxide, and nitrogen oxides) in one hour as more than 30 automobiles operating for one hour, and a snowmobile can emit as much as nearly 100 automobiles.³² This pollution from emissions of hydrocarbons, carbon monoxide, and nitrogen oxides — as well as particulate matter — has been linked to respiratory disease, cancer, and premature death.³³ Pollution from off-road vehicles in California has continued to rise over the last several decades (Figure 4).

Ozone

Ground-level ozone, the primary and most health-damaging component of smog, is a toxic gas formed from ozone precursors including industrial emissions and gasoline vapors and can affect health even when found in small amounts. According to the California Air Resources Board, off-road motorcycles and all-terrain vehicles produce 118 times as much smog-forming pollution as modern automobiles on a per-mile basis.³⁴

Figure 4. Increase in California Off-road Vehicle Pollution, 1990-2006

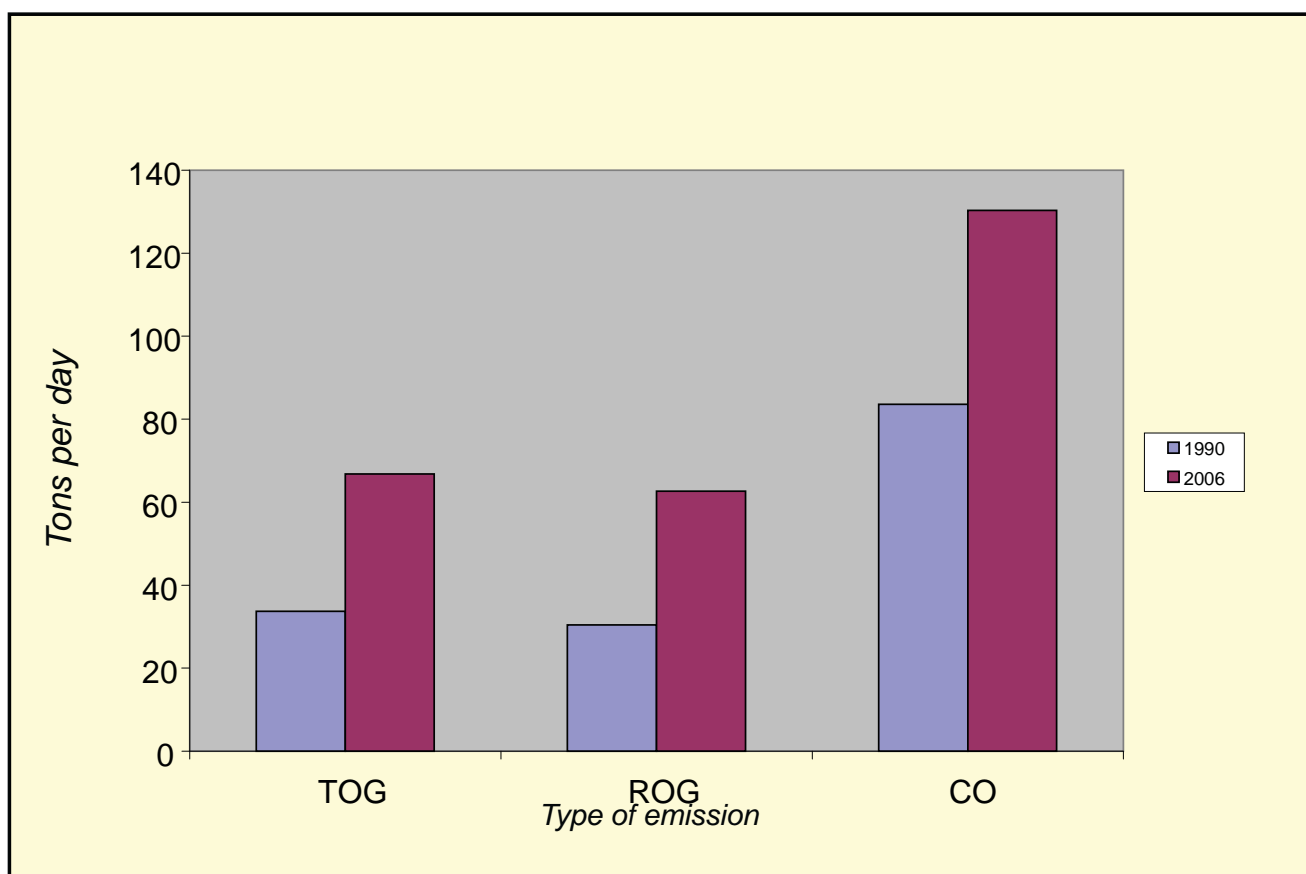


Figure 4: In California, emissions from off-road vehicles (all-terrain vehicles, dirt bikes and snowmobiles) of total organic gases (TOG) and reactive organic gases (ROG) have approximately doubled in the last 15 years while carbon monoxide (CO) emissions have shown a 56-percent increase.⁴³ Some of these pollutants are precursors to other pollutants. For example, oxides of nitrogen and reactive organic gases are precursors to ground level ozone and other greenhouse gases. Data from California Air Resources Board, <http://www.arb.ca.gov/app/emsinv/emssumcat.php>.

Ozone is a respiratory irritant and increased concentrations have been associated with reduced lung function and increased hospitalizations for asthma, especially for children or those with compromised respiratory systems.³⁵ Ozone can also have detrimental impacts on healthy populations. Studies of two healthy groups, outdoor postal workers in Taiwan and college freshmen who were lifelong residents of Los Angeles or the San Francisco Bay area, found that exposure to elevated ozone decreases lung function,³⁶ and chronic exposure may cause permanent lung damage.³⁷ Ozone has been linked to increased hospital admissions for respiratory conditions including respiratory infection, asthma, chest pain, cough, and significant decreases in lung function.³⁸

Elevated ozone concentrations pose a serious health concern. The American Lung Association reports that one-third of the U.S. population lives in areas with unhealthy levels of ozone nationwide.³⁹ One in three Americans lives in a county where the monitored air quality places them at risk for decreased lung function, respiratory infection, and lung inflammation.⁴⁰ California is home to 13 of 20 counties nationwide where residents are at the greatest risk from ozone pollution.⁴¹ This includes the six counties most at risk nationwide from ozone pollution: San Bernardino, Kern, Riverside, Los Angeles, Tulare, and Fresno.⁴² Many of these counties contain popular off-road vehicle areas like San Bernardino County's Johnson and Stoddard valleys and Dumont Dunes (among many others).

According to the California Air Resources Board, dirt bikes and all-terrain vehicles produce 118 times as much smog-forming pollutants as cars.

Particulate Matter

The subset of particulate matter known as PM₁₀ consists of fine particulate matter of 10 microns or less that is a mixture of airborne solid particles and liquid droplets from both man-made and natural sources. It is generally caused by wind-blown sources of dust or the interaction of sulfur oxides, nitrous oxides, and volatile organic compounds. Particle air pollution is the biggest and most pervasive air pollution risk humans face.⁴³ Particulate matter can be emitted directly into the atmosphere by combustion sources, including off-road vehicles, or it can be created by the combination of gases such as nitrous oxide and sulfur dioxide, both of which are also released by off-road vehicles. Like ozone and carbon monoxide, nitrogen oxides and sulfur dioxide are associated with decreased lung function.⁴⁴ When inhaled, particulate matter irritates the respiratory tract.⁴⁵ Due to the small size of some particles, they are easily inhaled and can lodge in the lungs, causing respiratory and cardiovascular health consequences, as well as increased hospital admissions of the elderly and children when particulate-matter levels increase.^{46, 47}

Dust is also a component of particle pollution, making unpaved roads the largest single source of particulate matter.⁴⁸ Off-road vehicles disturb soil crusts, crush soil, and generate wind that results in the creation and release of dust into the air. Because wind can disperse suspended particulates over long distances, dust raised by off-road vehicle traffic can disperse contaminants carried by dust well beyond a given off-road vehicle-use area. In 1973, for example, satellite photos detected six dust plumes in the Mojave Desert covering

more than 656 square miles, all attributable to off-road vehicle activities.⁴⁹

Particle pollution is a significant threat nationwide. The American Lung Association reports that one in three people in the United States lives in an area where they are subject to short-term exposure to particle pollution, while one in five people lives in an area where they are subject to exposure to unhealthy year-round levels of particle pollution.⁵⁰ Even at low levels, exposure to particles over time can increase risk of hospitalization for asthma, damage to the lungs, and — most significantly — the risk of premature death.⁵¹

Particle pollution is particularly serious in California when compared to other states. According to the Environmental Protection Agency, 16 California counties exceed accepted levels of particulate matter.⁵² In fact, the state is home to four of the five most polluted counties nationwide for both short-term and year-round particle pollution.⁵³

While the health affects associated with particulate matter are especially severe for fine particles ($PM_{2.5}$), there is evidence that coarse particle pollution (PM_{10}), most often associated with off-road vehicles, is also detrimental to health. Studies have found that for each 10 microgram-per-cubic-meter increase in PM_{10} , there was a 1-percent increase in hospital admissions for cardiovascular disease, and about a 2-percent increase in admissions for pneumonia and chronic obstructive pulmonary disease. Investigators concluded that their analysis provided “new and strong evidence” linking PM_{10} air pollution to adverse health effects.⁵⁴

Another study reported that deaths from respiratory diseases were associated with PM_{10} and total suspended particulates. They found that relative risks for coarse particles were similar to those for fine particles and even higher in the case of ischemic heart disease and stroke. The authors concluded that “the finding of elevated and significant effects for $PM_{10-2.5}$

suggests that there may still be a rationale to consider the health effects of the coarse fraction as well as the fine fraction of particulate matter.”⁵⁵

Other studies support the idea that coarse particles contribute to respiratory diseases and cardiovascular hospitalizations.⁵⁶

Although many peer-reviewed studies have examined the effects of particulate matter on health, relatively few have specifically addressed coarse particles, and those that have often focus on short-term exposures. The impacts of long-term exposure to coarse particles is an area in which more research is likely needed.

Carbon Monoxide and Oxides of Nitrogen

In addition to its serious impacts on the environment, carbon monoxide poses serious health risks because it strongly binds to hemoglobin in the blood, thereby reducing the amount of oxygen that reaches the organs. Exposures to low levels affect the most oxygen-sensitive organs of the body — the heart and the brain — and can result in fatigue, angina, reduced visual perception and dexterity, and even death. Further, though not a greenhouse gas itself, carbon monoxide can increase the lifespan of greenhouse gases, increase the production of ground-level ozone, and worsen climate change.⁵⁷ Transportation accounts for the majority of carbon monoxide released nationwide and in 2000, the Environmental Protection Agency determined that recreational vehicles cause or contribute to ambient carbon monoxide in more than one nonattainment area, including Los Angeles.⁵⁸

In 2001, the Environmental Protection Agency found that all-terrain vehicles, a subset of off-road vehicles, emit more than 381,000 tons of hydrocarbons, 1,860,000 tons of carbon monoxide, and 11,000 tons of oxides of nitrogen each year across the country.⁵⁹ The emissions of oxides of nitrogen alone

are equivalent to the annual greenhouse gas emissions from 566,575 passenger vehicles.⁶⁰ The Environmental Protection Agency has adopted National Ambient Air Quality Standards for some air pollutants that are of particular concern from a health perspective — including particulate matter, nitrogen oxide, carbon monoxide, sulfur dioxide, and ozone — which define maximum concentrations of these substances that are allowed in the air. However, many areas in California are not yet in compliance with these standards.⁶¹

The Environmental Protection Agency estimated that its 2002 rules regulating emissions from off-road vehicles and snowmobiles would avoid 1,000 premature deaths, prevent 1,000 hospital admissions, reduce 23,400 cases of asthma attacks, and reduce 200,000 days of lost work.⁶² It is estimated that these health benefits will equal a total of \$8 billion in 2030.⁶³

Still, even with the new regulations, unhealthy emissions from all types of recreational vehicles continue to increase in California (Figure 6). By regulating emissions from these vehicles, California will help protect the health of its residents.

Figure 6. Increase in Pollution by Vehicle Type in California, 1990-2006

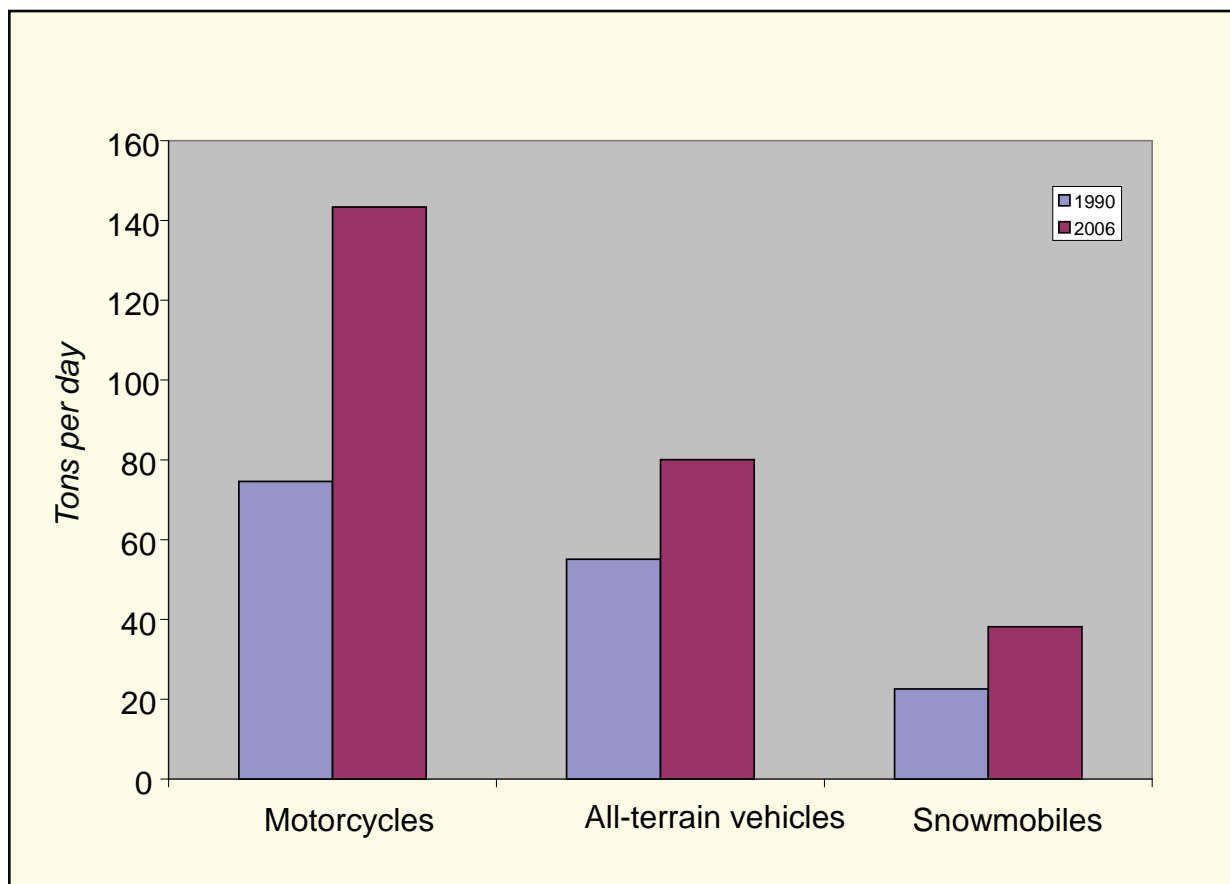


Figure 6: Each type of off-road vehicle showed an increase in total emissions (ROG, TOG, CO, NO_x and SO_x) over the past 15 years. Off-road motorcycles (dirt bikes) release the most, averaging about 143 tons (equivalent to the weight of 103 Toyota Priuses) of emissions per day in 2006. This was nearly double the average emissions (an increase of 95 percent) from dirt bikes in 1990. Over the same time period, all-terrain vehicles had an approximately 45-percent increase in total emissions, while snowmobiles had a 72-percent increase. Regulations require that the state of California cut overall greenhouse gas emissions to return to 1990 levels by the year 2020. Data from California Air Resources Board, <http://www.arb.ca.gov/app/emsinv/emssumcat.php>.

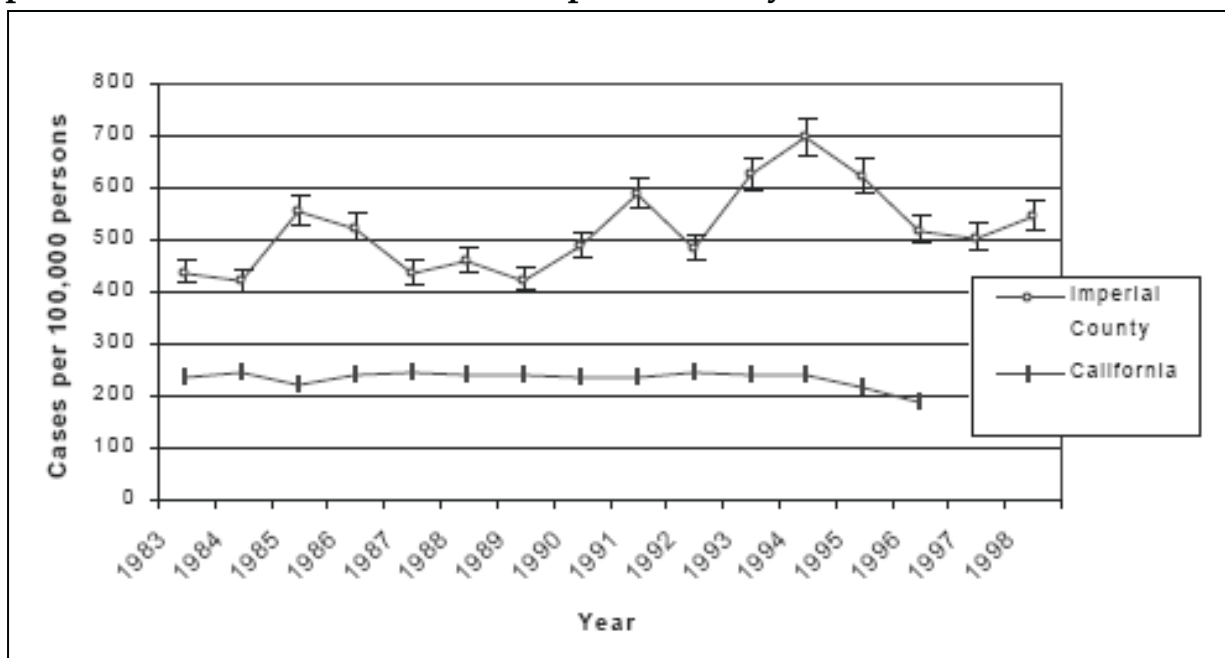
Case Study: Imperial County

Imperial County in southern California covers more than 4,597 square miles, bordering on Mexico to the south, Riverside County to the north, San Diego County on the west, and the state of Arizona to the east. The region currently exceeds federal standards for the particulate matter PM_{10} and both federal and state standards for ozone, and it has exceeded federal and state standards for both pollutants since 1996.^{64,65,66} Local surveys report that some locations measure more than 10 times the maximum allowable federal standard for particulate matter and that Imperial County suffers from the worst particulate air pollution in California.⁶⁷ In fact, particulate matter concentrations in Imperial Valley have been

measured at double the level deemed by the Environmental Protection Agency to cause significant harm to health.⁶⁸ The American Lung Association gave Imperial County an “F” for its failure to meet ozone standards and a “D” for its performance in terms of particle pollution.⁶⁹

As described above, the adverse health effects from particulate matter and ozone pollution are severe — and their impacts on Imperial County’s residents are readily apparent. Asthma is a serious problem, and Imperial has the highest child asthma rate of any county in California (Figure 7).⁷⁰ Asthma rates in Imperial County increased by 59 percent from 1983 to 1994. The county’s maximum ozone levels increased by 64 percent, and particulate-matter

Figure 7. Age-adjusted Childhood Asthma Hospitalization Rates and 95-percent Confidence Intervals for Imperial County and California, 1983-1998



This graph shows the childhood asthma rate intervals for Imperial County and California from 1983 to 1998. Overall, the state’s rate is fairly constant and is much lower than Imperial County’s, which shows much more fluctuation and an overall upward trend. The statewide rate is decreasing; however, the county’s rate is once again on the rise at the end of this study period and to the present.

Source: Imperial County Public Health Services

levels are four times higher in Imperial than in neighboring San Diego County.⁷¹

The California Department of Public Health Services recently found that Imperial County has the highest asthma hospitalization rates in the state for all race/ethnicity groups among all ages and for most race/ethnicity groups among children.⁷² Rates of respiratory diseases continue to worsen.⁷³ Air pollution is blamed as a contributor to the high rates of asthma, bronchitis, pneumonia, and allergies in this region, especially among children between the ages of one and 14 years.⁷⁴ Children are especially at risk, as are the elderly, asthmatics, and those with chronic pulmonary disease or heart disease (Figure 7).

Off-road vehicle use on public lands in Imperial County is a major contributor to the county's air quality problems. In fact, the federal Bureau of Land Management has stated that off-road vehicles are one of the county's most significant sources of the harmful pollutants ozone, oxides of nitrogen, carbon monoxide, and particulate matter.⁷⁵ Off-road vehicle emissions also contribute to the county's increased levels of reactive organic gases.

Still, federal and state agencies continue to encourage off-road vehicle use throughout Imperial County. On holiday weekends, the Imperial Sand Dunes Recreation Area, run by the federal Bureau of Land Management, can be used by hundreds of thousands of off-road vehicle users. Other popular federal off-road vehicle areas include Superstition, Plaster City, Heber Dunes, and parts of the California Desert Conservation Area. State-run areas allowing off-road vehicle use include the Ocotillo Wells State Vehicular Recreation Area on the border of San Diego and Imperial counties, Desert Cahuilla, and portions of Anza-Borrego Desert State Park.

The high concentration of off-road vehicle use in Imperial County, coupled with the poor public health of its residents — which studies partially correlate to air pollution — implies that there is a need for further research. This research should focus on the contribution of off-road vehicles to pollution in the county and should seek to parse out the impacts that off-road vehicle pollution is having on poor public health. In the meantime, considering Imperial County's record-high childhood-asthma rates together with its massive off-road vehicle use — and the severe health implications of its violation of federal and state air-pollution standards — isn't it time for the state and federal governments to rein in anything that may be contributing to these increased levels, including off-road vehicle pollution?

Figure 7. Imperial County Public Health Statistics

CONDITION	NUMBER OF CASES
Pediatric asthma	4,201
Adult asthma	7,813
Chronic bronchitis	4,335
Emphysema	1,731
Cardiovascular disease	31,151
Diabetes	7,437
Total population with any of above conditions	155,823
Population younger than 18	47,199
Population 65 and older	16,035

Source: American Lung Association, *State of the Air: 2007*

Off-road Vehicles' Exemption From California Emission Standards

In the 1990s, the California Air Resources Board attempted to address the air-quality impacts of recreational pollution by adopting emission-control regulations for new off-road recreational vehicles, including off-road motorcycles (dirt bikes) and all-terrain vehicles.⁷⁶ The regulations require that all off-road recreational vehicles sold in California, model year 1998 and later, are certified by the Board to meet state emissions standards.⁷⁷

But manufacturers and off-road vehicle groups, while initially supportive, soon balked at the new regulations, claiming that the requirements decrease off-road vehicle sales.⁷⁸ Off-road vehicle user groups and industry representatives mounted an intense lobbying campaign urging the Board to weaken the new regulations.

In 1998, the California Air Resources Board succumbed to industry pressure and approved amendments to the new emission regulations that allow the continued operation of especially polluting off-road vehicles.⁷⁹ This clause distinguished types of off-road vehicle registration based on compliance (or noncompliance) with California's exhaust emission standards. Emission-compliant dirt bikes and all-terrain vehicles were (and still are) eligible for a "green-sticker" registration that allows them to be operated year round. Noncompliant dirt bikes and all-terrain vehicles were (and still are) eligible for a "red-sticker" registration and are subject to usage restrictions

Despite violating emissions standards, polluting "red-sticker" vehicles may still be ridden in many places during many months of the year (Appendix A).⁸⁰ A red sticker merely limits recreational use in certain places to those months of the year determined by the California Air Resources Board to have the lowest levels of ozone pollution — mainly, the months of fall, winter, and spring. To make matters worse, the California Air Resources

Board grandfathered in all off-road vehicles manufactured before 2003. A press release from California State Parks explains:

"Because of the confusion as to which vehicles required which stickers ... to start with a clean slate, the DMV will provide Green Stickers to all 2002 model year and older OHVs, regardless of emission standards."⁸¹

Instead of re-evaluating each vehicle to ensure compliance, the Board

revised its regulations once again so that all 2002 model year and older off-road vehicles would receive green stickers, even if these same vehicles had previously been certified as noncompliant based on their emissions.

To date, off-road vehicles that do not comply with state emission standards may still be sold in the state and used throughout much of the year in California, creating a loophole in the state's emissions regulations that undermines its commitment to protecting the public health of its residents.

Red stickers allow off-road vehicles that do not meet state emission standards to be used throughout much of California for most of the year.

Biological and Cultural Benefits of Limiting Off-road Vehicle Use

The impacts of off-road vehicles on the environment have been well documented. Off-road vehicle use impairs water quality, degrades wildlife habitat, threatens California's archeological heritage, and destroys the peace and quiet that Californians want and expect from the great outdoors.⁸²

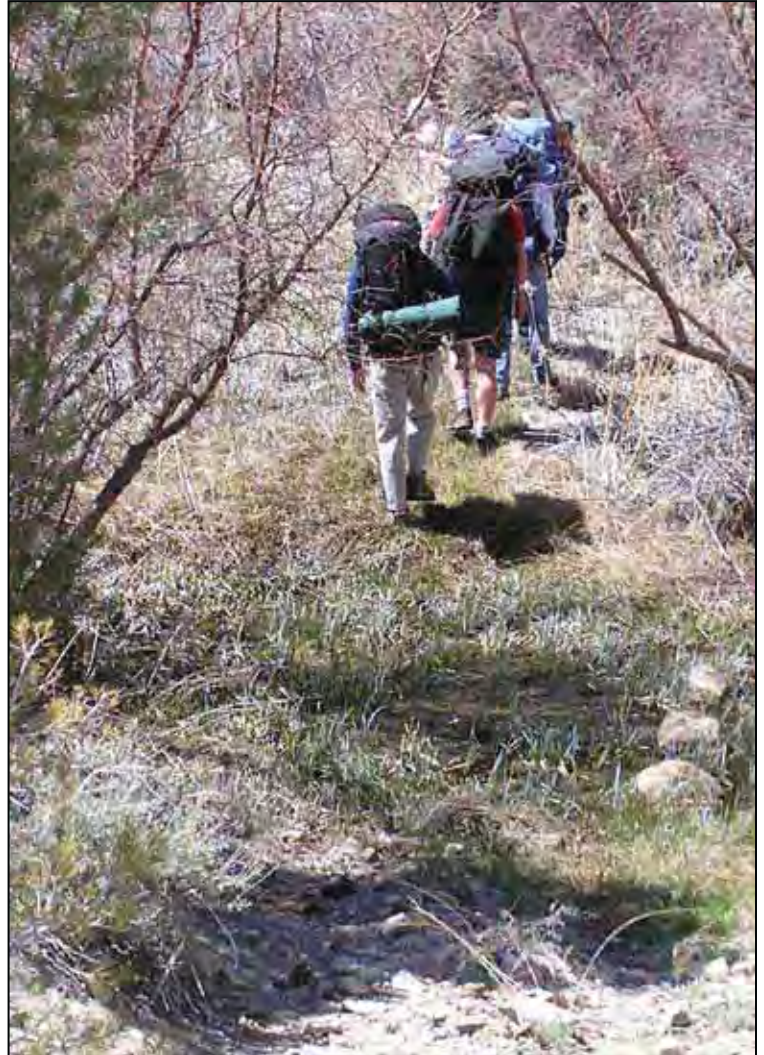
Encouraging Quiet Outdoor Recreation

Most people visit the outdoors seeking peace and quiet, wanting to recharge their batteries by taking a break from the ever-increasing pace of modern life. Walking, hiking, wildlife viewing, camping, and picnicking are among the most popular outdoor recreation activities of Californians,⁸³ while off-road vehicle use, riding dirt bikes, and snowmobiling are among the least popular.⁸⁴ Muscle-powered recreationists, including hunters, anglers, bird watchers, cross-country skiers, and hikers — which make up the largest user group on public lands and overall in California — are losing access to places where ecological integrity is intact and quiet prevails. Reducing off-road vehicle traffic would mean more opportunities for quiet recreationists to enjoy peaceful and undisturbed experiences in nature.

Improving Water Quality

Off-road vehicle use near streams, rivers, and lakes can degrade water quality, both negatively impacting the creatures who live there and creating a serious threat to the quality of our drinking water.⁸⁵

Off-road vehicles expel 20 to 30 percent of their oil and gasoline unburned, releasing it into air and water.⁸⁶ With off-road vehicle use exceeding 80 million visitor days in national forests alone, tens of millions of gallons of gasoline and motor oil likely enter the soils and waters of our public lands each year as a result of inefficient combustion and emissions.⁸⁷ This is significant because national



Hikers near Furnace Creek. Hiking ranked ninth out of 55 in a study of the most popular outdoor activities in California. Off-road vehicle use ranked 38th.

Photo by Daniel Patterson

forests are the largest and most important water source in the United States: more than 60 million Americans in 3,400 communities from 33 states get their drinking water from watersheds that originate on our national forests and grasslands.⁸⁸

Areas on the Inyo National Forest and surrounding lands managed by the Bureau of Land Management show evidence of degraded water quality and habitat due to off-road vehicles. The Bureau of Land Management found that Furnace Creek in the White Mountains does not meet the Bureau of Land Management's standards for a properly functioning riparian system. They report:

Presently, portions of the Furnace Creek drainage are considered "functional-at risk."

Riparian-wetland areas are considered "functional-at risk" when an existing soil, water, or vegetation condition makes them susceptible to degradation. Presently, there are seven locations in Furnace Creek where the existing vehicle route crosses the stream. Significant erosion and sedimentation of the stream are occurring at two stream crossings. Erosion in both locations is contributing excessive sediment to the adjacent riparian area. Moreover, headcutting is forming at both locations. Headcuts are a fluvial geomorphic feature indicative of unstable conditions. The proposed closure order is consistent with protecting and restoring Furnace Creek to a "properly functioning" riparian system.⁸⁹

Although Furnace Creek is not a key source of drinking water, it is a good example of what recreational off-road vehicle use can do to a stream and surrounding habitat. Both air and water pollutants have been shown to have measurable impacts to stream environments.⁹⁰ In addition to releasing pollutants, off-road vehicles cause erosion and sedimentation that pours dirt directly into streams and rivers, also degrading water quality and habitat for animals that are key to functioning riparian ecosystems.⁹¹

Another example of a degraded waterway is the Pajaro River, listed as an "impaired water body"



Mud pit created by off-road vehicles near Furnace Creek.

Besides emitting greenhouse gases, off-road vehicles can do tremendous damage to public lands.

Photo by Paul McFarland

under the federal Clean Water Act, which flows into the protected Monterey Bay National Marine Sanctuary and which faces a number of problems including erosion, sedimentation, and pollution.⁹² Off-road vehicle activity has directly impacted water quality in this watershed and has exacerbated sediment migration and degraded habitat along riparian corridors and in the Clear Creek area.⁹³ Reducing off-road vehicle use in California has the potential to increase the quality of drinking water for Californians and the creatures that need this habitat for survival.

Reducing Wildlife Habitat Degradation

Off-road vehicle recreation has severe impacts on wildlife and habitat. It is the third-leading cause of species endangerment — behind only direct habitat destruction and invasive species — and 43 percent of California’s threatened and endangered species are declining in whole or in part because of off-road vehicles, including the Peninsular bighorn sheep, Mojave fringe-toed lizard, snowy plover, and Peirson’s milk-vetch.⁹⁴ A reduced number of off-road vehicles would provide these and other species an opportunity to survive, thus preserving an important part of California’s natural legacy. On a larger scale, the greatest impacts of off-road vehicles to species and habitats may be the greenhouse gases that contribute to global warming.

Helping Preserve Archeological Sites

California’s lands are rich with cultural and archeological resources that also can be destroyed by off-road vehicles. According to the Bureau of Land Management, prehistoric sites in the California desert have been “run over and ridden through, and tires have been spun on them,” leading to the degradation



Peirson’s milk-vetch in flower. Off-road vehicle use is one of the biggest obstacles to the recovery of the threatened Peirson’s milk-vetch.

Photo by Andreas Chavez

or complete destruction of archeological sites thousands of years old.⁹⁵ For example, “donuts” or off-road vehicle tracks, were recently found through ancient sleeping circles in the Desert Cahuilla area adjacent to Anza Borrego State Park. Not only would reducing off-road vehicle use help protect California’s land, air, and water — it would also contribute to the preservation of the state’s cultural heritage for future generations to enjoy.

California's Continued Support for Off-road Vehicle Use — Despite the Consequences

Currently, more than 200 private, county, state, and federal sites in California are open to off-road vehicle use, and regardless of these vehicles' significant impacts to public health, the global climate, and local ecosystems, the state continues to encourage expanded off-road vehicle recreation on public lands.

Off-road Vehicle Use on State Lands

The Off-Highway Motor Vehicle Recreation Division of California's Department of Parks and Recreation manages six state vehicular recreation areas to provide off-road vehicle opportunities.⁹⁶ Attendance at these areas increased by 52 percent between 1985 and 2000 — with a corresponding increase in greenhouse gas emissions.⁹⁷ Still, the Off-Highway Motor Vehicle Recreation Division is calling for an increase in new off-road vehicle facilities in the coming years.⁹⁸

Other state lands also allow off-road vehicle use. Anza Borrego Desert State Park, for example, contains more than 500 miles of roads for four-wheel-drive and all-terrain vehicles and dirt bikes. Overall, the state of California provides thousands of miles of routes for off-road vehicle use throughout its state parks

and more than 105,000 acres in state vehicular recreation areas. The use in state vehicular recreation areas shows an overall increase from 1992 to 2001 with estimated visitors in 2001 reaching more than 2.3 million (see Appendix B).⁹⁹



Sport utility vehicles churning up dust

Photo by Larry Hogue

Despite this, there has been little effort to consider the impacts of this growth on global climate change and emissions by the Department of Parks and Recreation. The Department's two-page "Response to Climate Change" devotes only a single paragraph to the Off-Highway Motor Vehicle Recreation Division, stating simply that the agency will take actions consistent with the Department's direction and will retrofit its trucks to comply with new California Air Resources Board

standards.¹⁰⁰ There is virtually no mention of the significant climate and health effects of continued and expanded off-road vehicle use and no evidence of effort to avoid or mitigate greenhouse gas emissions associated with state-supported off-road vehicle use.

Off-road Vehicle Use on Federal Lands

California's federal lands offer millions of very accessible acres and thousands of miles of trails

for off-road vehicle use. According to the Government Accounting Office, California boasts twice as many areas offering off-road vehicle recreation opportunities than in any other state¹⁰¹ — and the state itself is the primary supporter of off-road vehicle recreation on these lands. (See Appendix C for a breakdown of federal lands open to off-road vehicle use.)

The Angeles National Forest in southern California, for example, is within an hour's drive of Los Angeles and currently provides 364 miles of designated off-road vehicle routes and more than 10,000 acres for open off-road vehicle use. Off-road vehicles contribute to poor air quality in Los Angeles, a non-attainment area, by releasing carbon monoxide and other contaminants into the air.¹⁰² Still, the State of California spent \$5.6 million between 1983 and 1998 to support off-road vehicle recreation on the Forest, including \$401,720 to construct 36 miles of off-road vehicle trails in 1983 and \$361,000 to develop another 58 miles of off-road vehicle routes in 1988.¹⁰³

All told, the state provided the U.S. Forest Service with more than \$58 million to support off-road vehicle recreation between 1983 and 1999.¹⁰⁴ Funding has continued for the past 25 years and in fact has expanded in recent years. For example, in 2006 and 2007, California sent the federal government more than \$25 million to support off-road vehicle recreation and management on federal lands in the state.¹⁰⁵ Despite California's goals of reducing greenhouse gas emissions and protecting public health, its support for off-road vehicle recreation on federal lands continues.

Currently, all California national forests are undergoing travel-management planning to designate roads, trails, and areas where off-road vehicles are specifically allowed.

¹⁰⁶ The Bureau of Land Management occasionally revises management guidelines for its lands open to off-road vehicles. But to date, the State of California has taken no substantive position regarding the climate change and public health implications of state-supported off-road vehicle recreation on public lands.



Tracks near Anza-Borrego Desert State Park. The California Department of Parks and Recreation has done little to address the climate change implications of off-road vehicles' increasing greenhouse gas emissions.

Photo by Larry Hogue

Recommendations

In order to prevent needless off-road vehicle pollution from further imperiling the global climate and public health, the California Air Resources Board must limit overall greenhouse gas emissions from off road vehicles to the maximum extent possible. Consistent with Assembly Bill 32 and the governor's executive order, a reduction to 1990 levels by 2020 should be considered only as the minimum reduction alternative. Such a limitation will ensure that recreational off-road vehicles are reducing emissions at the same pace as are other sectors of the population and will have important health benefits for Californians.



Off-road motorcycle in dune recreation area. No new state off-road vehicle sites should be established unless they fit an overall scheme to reduce off-road vehicle emissions to 1990 levels.

Photo by George Wuerthner

There are two ways to effectively limit greenhouse gas emissions from off-road vehicles: capping the number of vehicles registered and limiting their use. The surest way to limit overall off-road recreation emissions is to reduce the amount of off-road recreation allowed on both state and federal public lands throughout California. Specifically, the following should be achieved:

- **Reduction of greenhouse gas emissions from off-road vehicle use in state vehicular recreation areas and other state lands to at least 1990 levels**

The California Air Resources Board must analyze the amount of greenhouse gases being emitted from off-road vehicle use within state vehicular recreation areas and other state lands, while the Department of Parks and Recreation ensures that, at a minimum, off-road vehicle emissions from these areas are reduced to 1990 levels. Further emission reductions may be required if federal agencies do not reduce emissions from off-road vehicles on federal lands.

No new state off-road vehicle sites should be established unless they are consistent with an overall

scheme to reduce total off-road vehicle emissions to 1990 levels.

• **Enforced federal management of California off-road recreation limiting off-road vehicle emissions to, at a minimum, 1990 levels**

Because significant greenhouse gas emissions arise from off-road vehicle use on federal lands, the State of California must ensure that those emissions are reduced along with emissions from other sources. The state should ensure that federal agencies managing off road vehicles in California are limiting greenhouse gas emissions from discretionary recreational off-road vehicle use; a reduction in this source to 1990 levels by 2020 should be considered as the minimum reduction alternative. The state should also deny financial support and permits to federal agencies that do not meet this target.



Hillside scarred by off-road vehicle use. The California Department of Parks and Recreation now provides tens of millions of dollars to federal agencies to promote and manage polluting and damaging off-road vehicles.
Photo by Chris Kassir

First, this requires that the California Air Resources Board adopt rules that call for the rejection of applications for new, continued, or expanded off-road vehicle use on federal lands from federal agencies or districts that do not have an adequate plan to reduce overall off-road vehicle emissions from their jurisdiction to, at a minimum, 1990 levels.

Second, this means that the Off-Highway Motor Vehicle Recreation Division should adopt rules requiring the rejection of applications for funding from federal agencies or districts that do not have a sufficient plan to reduce overall off-road vehicle emissions from their jurisdiction to the maximum extent possible — at a minimum, to 1990 levels by 2020. Currently, the California Department of Parks and Recreation provides tens of millions of dollars to federal agencies to promote and manage off-road vehicles.

Finally, the State of California should provide substantive comments on federal land-use plans and proposals that will result in increased greenhouse gas emissions. The California Air Resources Board and other state agencies should take substantive positions on proposed federal land management plans — including pending travel-management plans — and projects that urge federal land management agencies to ensure that each plan or project is consistent with an overall plan to reduce off-road vehicle emissions to at least 1990 levels. The state should encourage a cap on off-road vehicle use on federal lands that is scaled to achieve maximum emission reductions.. To date, California has not offered consistent substantive comments on federal land-use proposals that will impact global climate change.

- **A cap on the number of registrations issued for off-road vehicles in California.**

The Department of Motor Vehicles should cap off-road vehicle registrations to achieve an emission reduction to, at a minimum, 1990 levels, which should be adjusted depending on the effectiveness of limitations on use described above. Because registration enforcement is lax, additional resources will be required for effective enforcement. Additionally, the California Air Resources Board should immediately address the adverse public health effects and climate implications of non-conforming off-road vehicles.

- **Elimination of loopholes that allow continued use of polluting off-road vehicles that fail to meet state emission standards.**

Just as California does not allow the continued use of automobiles that do not meet state emission standards, the state should not allow use of off-road vehicles that fail to comply with state standards. The California Air Resources Board should eliminate the “red-sticker” loophole that allows continued use of polluting off-road vehicles that do not meet state emission standards.

- **Rejection of continued or expanded off-road vehicle use on federal lands in areas that do not meet air quality standards.**

California must certify that proposed land uses on federal lands conform with the state’s enforcement of the Clean Air Act. To date, the state regularly approves these uses — even in non-conforming areas like Imperial County — without significant evaluation. The California Air Resources Board should reject proposals to continue or expand off-road vehicle recreation on federal lands in areas that do not meet air quality standards.



Off-road vehicle tracks with run-over sign. Enforcement of rules is lax on public lands. The Department of Motor Vehicles will need more resources to institute and enforce a cap on off-road vehicle registrations.

Photo by Larry Hogue

Conclusion

The State of California has developed laudable goals to reduce greenhouse gas emissions and protect the health of California residents. Exhaust from off-road vehicles contains the same greenhouse gases as emissions from cars — and significantly more pollution. In addition, just as the number of cars on the road has increased, off-road vehicle use has skyrocketed in the last 20 years. The continued rise of off-road vehicle recreation — and the pollution and greenhouse gas emissions associated with it — threaten to undermine the state’s goals for reversing climate change and improving public health.

The California Air Resources Board must place recreational off-road vehicle pollution on the table with emissions from automobiles, smokestacks, and other polluters. The state must take immediate action to prevent off-road vehicle pollution from continuing to jeopardize the public health of California residents, contributing to disastrous changes in climate, and otherwise harming California’s natural and cultural heritage.



Dust plume from off-road vehicle staging near public lands

Photo courtesy Community ORV Watch

Appendix A: Off-road Vehicle Riding Areas Open to Non-compliant Vehicles

California Air Resources Board (CARB) Non-compliant OHV (Red Sticker) Riding Season Schedule		Map Area ID	Red Sticker Riding Season	
			Riding Starts	Riding Ends
State Vehicular Recreation Areas (SVRA)				
SVRA	Clay Pit	38	1-Sep	30-Jun
State Recreation Area (SRA)	Mammoth Bar	40	Year round	
SVRA	Prairie City	53	1-Oct	30-Apr
SVRA	Carnegie	65	1-Oct	30-Apr
SVRA	Hollister Hills	75	1-Oct	31-May
SVRA	Oceano Dunes	87	Year round	
SVRA	Hungry Valley	102	1-Oct	30-Apr
SVRA	Ocotillo Wells	124	1-Oct	31-May
SVRA	Heber Dunes	128	Year Round	
Bureau of Land Management (BLM)				
Northern California				
BLM Arcata Field Office	Samoa Dunes	6	Year round	
BLM Redding Field Office	Chappie-Shasta ORV Area	8	1-Oct	30-June
BLM Eagle Lake Field Office	Fort Sage OHV Area	16	Year round	
BLM Ukiah Field Office	South Cow Mountain Recreation Area	36	Year round	
BLM Ukiah Field Office	Knoxville Recreation Area	37	Year round	
Bakersfield District				
BLM Hollister Field Office	Clear Creek Management. Area	76	1-Oct	31-May
BLM Bishop Field Office	Bishop Resource Area	82	Year round	
California Desert District				
BLM Ridgecrest Field Office	Olancha Dunes	96	Year round	
BLM Ridgecrest Field Office	Jawbone Canyon, Dove Springs	103	1- Sep	31-May
BLM Ridgecrest Field Office	Spangler Hills	104	1 Sep	31-May
BLM Barstow Field Office	Dumont Dunes	105	Year round	
BLM Barstow Field Office	El Mirage	109	1-Oct	30-Apr
BLM Barstow Field Office	Stoddard Valley	110	1-Sep	31-May
BLM Barstow Field Office	Rasor	111	1-Sep	31-May
BLM Barstow Field Office	Johnson Valley	115	1-Sep	31-May
BLM Needles Field Office	Eastern Mojave Desert Areas	118	Year round	
BLM Lake Havasu Field Office	Parker Strip	120	Year round	
BLM Palm Springs Field Office	Colorado Desert Areas	122	1-Oct	30-Apr
BLM El Centro Field Office	Lark Canyon	127	1-Oct	30-Apr
BLM El Centro Field Office	Arroyo Salado	125	1-Oct	31-May
BLM El Centro Field Office	Superstition Mountain	129	1-Oct	31-May
BLM El Centro Field Office	Plaster City	130	1-Oct	31-May
BLM El Centro Field Office	Imperial Dunes-Mammoth Wash	131	Year round	
BLM El Centro Field Office	Imperial Dunes-Glamis/Gecko	132	Year round	
BLM El Centro Field Office	Imperial Dunes-Buttercup Valley	133	Year round	

United States Forest Service (USFS)				
Shasta-Trinity National Forest				
Mc Cloud Ranger District	McCloud Area	5	Year round	
Hayfork Ranger District	Hayfork Area	7	Year round	
Plumas National Forest				
Mt. Hough Ranger District	Deadman Springs, Snake Lake	18	Year round	
Mt. Hough Ranger District	Big Creek, Four Trees, French Creek	20	Year round	
Feather River Ranger District	Cleghorn Bar, Poker Flat	22	Year round	
Beckworth Ranger District	Gold Lake	25	Year round	
Beckworth Ranger District	Dixie Mountain	27	Year round	
Mendocino National Forest				
Upper Lake Ranger District	Lake Pillsbury	33	Year round	
Upper Lake Ranger District	Elk Mountain Area	34	Year round	
Grindstone Ranger District	Davis Flat	35	Year round	
Tahoe National Forest				
Downieville Ranger District	Downieville Area	23	Year round	
Foresthill Ranger District	Foresthill OHV Area	49	Year round	
Foresthill Ranger District	China Wall	50	Year round	
Nevada City Ranger District	Nevada City District Areas	41	Year round	
Nevada City Ranger District	Fordyce	42	Year round	
Sierraville Ranger District	Sierraville Area	30	Year round	
Truckee Ranger District	Truckee District Area	43	Year round	
Truckee Ranger District	Prosser Hills Area	44	Year round	
Lake Tahoe Basin Management Unit	Kings Beach	47	Year round	
Eldorado National Forest				
Georgetown Ranger District	Mace Mill, Rock Creek	51	Year round	
Pacific Ranger District	Barrett Lake	52	Year round	
Stanislaus National Forest				
Calaveras Ranger District	Corral Hollow, Spicer	58	Year round	
Summit Ranger District	Niagara Ridge Area	60	Year round	
Mi-Wuk Ranger District	Crandall Peek, Deer Creek Area	62	1-Oct	31-May
Mi-Wuk Ranger District	Hunter Creek	63	1-Oct	31-May
Mi-Wuk Ranger District	Hull/Trout Creek	64	1-Oct	31-May
Groveland Ranger District	Date Flat, Moore Creek Area	69	1-Oct	31-May
Sierra National Forest				
Mariposa/Minarets Ranger District	Hites Cove	70	1-Oct	31-May
Mariposa/Minarets Ranger District	Miami Motorcycle Trails	71	1-Oct	31-May
Kings River-Pineridge Ranger District	Huntington Lake	77	1-Oct	31-May
Kings River-Pineridge Ranger District	Eastwood	78	1-Oct	31-May
Kings River-Pineridge Ranger District	Shaver Lake Area	79	1-Oct	31-May
Kings River-Pineridge Ranger District	Kings River, Pineridge	81	1-Oct	31-May
Hume Lake Ranger District	Quail Flat	83	1-Oct	31-May

Sequoia National Forest				
Greenhorn Ranger District	Frog Meadow Area	90	1-Oct	31-May
Tule River Ranger District	Tule River Area	93	1-Oct	31-May
Cannell Ranger District	Kennedy Meadows	95	Year round	
Inyo National Forest				
White Mountain Ranger District	Poleta	97	Year round	
Los Padres National Forest				
Santa Lucia Ranger District	Black Mountain	88	Year round	
Mt. Pinos Ranger District	Ballinger Canyon	98	1-Oct	30-Apr
Mt. Pinos Ranger District	Alamo Mountain	99	1-Oct	30-Apr
Santa Barbara Ranger District	Santa Barbara	100	1-Oct	30-Apr
Ojai Ranger District	Ortega Trail	101	1-Oct	30-Apr
Angeles National Forest				
Santa Clara/Mojave Rivers Ranger District	Drinkwater Flats	106	1-Oct	30-Apr
Santa Clara /Mojave Rivers Ranger District	Rowher Flat	107	1-Oct	30-Apr
Santa Clara/Mojave Rivers Ranger District	Littlerock	108	1-Oct	30-Apr
San Gabriel River Ranger District	San Gabriel	112	1-Oct	30-Apr
San Bernardino National Forest				
Front Country Ranger District	Lytle Creek Area	113	1-Oct	30-Apr
Mountain Top Ranger District	Lake Arrowhead Area	116	1-Oct	30-Apr
Mountain Top Ranger District	Big Bear Lake Area	117	1-Oct	30-Apr
San Jacinto Ranger District	San Jacinto Area	121	1-Oct	31-May
Cleveland National Forest				
Trabuco Ranger District	Wildomar	123	1-Oct	30-Apr
Descanso Ranger District	Corral Canyon	126	1-Oct	30-Apr
Other Jurisdictions				
Army Corps of Engineers	Black Butte Lake	32	Year round	
City of Marysville (Riverfront)	Eugene Chappie OHV Park	39	Year round	
Santa Clara County	Metcalf Motorcycle Park	66	1-Oct	30-Apr
Stanislaus County	Frank Raines-OHV Park	67	1-Oct	30-Apr
Stanislaus County	La Grange	68	1-Oct	30-Apr
San Bernardino County	Park Moabi	119	Year round	

This list was provided by the California Air Resources Board (CARB). It will be updated periodically and you may contact CARB at (800) 242-4450 for more information.

Map available from California State Parks OHMVR Division that corresponds to Map Area ID.

Appendix B: State Vehicular Recreation Area Visitation, 1992-2006

This chart shows the number of visitors to state vehicular recreation areas. Data results from a combination of estimates based on field observations and paid entrance fees and conversion factors. Data includes both paid and free entries.

SVRA	1992	1993	1994	1995	1996	1997	1998
Carnegie	46,986	45,547	48,740	38,446	35,302	41,976	69,918
Heber Dunes	---	---	---	---	---	---	---
Hollister Hills	92,098	93,180	86,460	81,235	89,464	99,757	109,694
Hungry Valley	113,157	112,827	93,477	152,075	143,889	96,492	107,988
Oceano Dunes	1,173,019	1,090,522	925,131	1,106,221	1,090,223	1,075,621	1,013,728
Ocotillo Wells	288,800	301,092	298,418	306,874	323,414	302,607	236,722
Prairie City	43,730	36,278	42,349	44,800	56,802	56,926	55,652
Total visitation	1,757,790	1,679,446	1,494,575	1,729,651	1,739,094	1,673,379	1,593,702

SVRA	1999	2000	2001	2002	2003	2004	2005	2006
Carnegie	102,488	118,687	124,332	137,547	135,941	127,135	120,215	128,056
Heber Dunes	---	26,505	26,704	32,459	30,249	45,056	48,605	49,123
Hollister Hills	125,800	153,003	143,473	158,785	186,771	177,714	165,104	187,004
Hungry Valley	128,419	352,760	382,225	450,737	536,591	544,322	357,634	237,347
Oceano Dunes	1,093,647	1,243,445	1,204,541	1,364,397	1,428,472	1,809,469	2,055,631	1,991,445
Ocotillo Wells	281,751	365,933	325,056	495,786	609,762	816,450	938,554	1,324,389
Prairie City	77,413	93,720	121,271	140,344	149,446	193,330	188,368	168,941
Total visitation	1,809,518	2,354,053	2,327,602	2,780,055	3,077,232	3,713,476	3,874,111	4,086,305

Source: California State Parks, Off-highway Motor Vehicle Division

Appendix C: Public Lands in California Open to Off-road Vehicles¹⁰⁶

State Lands

State Vehicle Recreation Areas:

Carnegie: 1500 acres
 Hollister Hills: 3200 acres
 Hungry Valley: 19,000 acres
 Oceano Dunes: Approximately 3,800 acres
 Ocotillo Wells: More than 80,000 acres
 Prairie City: 836 acres

Federal Lands

National Forests:

Angeles: 364 miles of designated off-highway vehicle routes and more than 10,000 acres of open areas
 Cleveland: More than 600 miles of roads and trails; more than 400,000 acres of open areas
 Eldorado: 2200 miles of roads
 Humboldt-Toiyabe: More than 1500 miles of roads and trails; more than 800,000 acres open to cross-country travel (California portion of the forest)
 Inyo: More than 3,000 miles of roads and trails; more than 1 million acres of open areas
 Klamath: More than 5,000 miles of roads and trails; more than 1 million acres of open areas
 Lake Tahoe: More than 4,000 miles of roads and trails; more than 900,000 acres of open areas
 Lassen: More than 4,000 miles of roads and trails; more than 1 million acres of open areas
 Los Padres: More than 1,500 miles of roads and trails
 Mendocino: More than 800 miles of roads and trails
 Modoc: More than 1 million acres of open areas
 Plumas: More than 1 million acres of open areas
 San Bernardino: 42 miles of 24- to 50-foot trails; 166 miles for green-sticker/red-sticker use; 903 miles of road open to sport utility vehicles and four-wheel-drive vehicles
 Sequoia: 1,267 miles of roads and trails, including trails open to off-road vehicle use within the Giant Sequoia National Monument; 10,000 acres of open areas
 Shasta-Trinity: More than 6,000 miles of roads and trails; more than 200,000 acres of open areas
 Sierra: More than 2,000 miles of roads and trails; more than 500,000 acres of open areas
 Six Rivers: more than 3,000 miles of roads and trails
 Stanislaus: more than 3,000 miles of roads and trails; more than 500,000 acres of open areas
 Tahoe: More than 4,000 miles of trails and roads; more than 900,000 acres of open areas

Bureau of Land Management Lands

Within the Bureau of Land Management's field offices, there are 11 million acres of agency land in California available for open and limited off-road vehicle recreation. The following is not a comprehensive list of all areas managed by the Bureau of Land Management in which off-road vehicles are allowed, but it lists some of the more well-known open off-road vehicle areas managed by the agency in California.¹⁰⁷

Chappie-Shasta: 200 miles of trail, Shasta County
Cow Mountain: 52,000 acres, Lake and Mendocino Counties
Clear Creek Management Area: 76,000 acres, San Benito and Fresno Counties
Dove Springs: 5,000 acres, Kern County
Dumont Dunes: 8,150 acres, San Bernardino County
El Mirage Dry Lake Off-highway Vehicle Area; 24,000 acres, San Bernardino County
Fort Sage: 22,000 acres, Lassen County
Jawbone Canyon: 7,000 acres, Kern County
Johnson Valley: 140,000 acres, San Bernardino County
Imperial Sand Dunes: 150,000 open acres; Imperial County
Knoxville: 17,700 acres, Lake and Napa Counties
Lark Canyon: 1200 acres; 31 miles of trails, San Diego County
Plaster City: 41,000 acres, Imperial County
Razor: 22,500 acres, San Bernardino County
Samoa Dunes; 300 acres, Humboldt County
Spangler Hills; 57,000 acres, Kern County
Stoddard Valley; 50,000 acres, San Bernardino County

Notes

1. International Panel on Climate Change (IPCC), *Climate Change 2007: The Physical Science Basis – A Summary for Policymakers* (IPCC, 2007), <http://www.ipcc.ch/ipccreports/ar4-syr.htm>.
2. Ibid.
3. Gerald A. Meehl et al., “How Much More Global Warming and Sea Level Rise?” *Science* 307, no. 5716 (2005): 1769-1772; and T. M.L. Wigley, “The Climate Change Commitment,” *Science* 307, no. 5716 (2005): 1766-1769.
4. See, e.g., California Climate Change Center (CCCC), *Projecting Future Sea Level* (Sacramento, CA: CCCC, 2006), <http://www.energy.ca.gov/2005publications/CEC-500-2005-202/CEC-500-2005-202-SF.PDF>; CCCC, *Climate Change and Electricity Demand in California* (Sacramento, CA: CCCC, 2006), <http://www.energy.ca.gov/2005publications/CEC-500-2005-201/CEC-500-2005-201-SF.PDF>; CCCC, *Public Health-related Impacts of Climate Change in California* (Sacramento, CA: CCCC, 2006), <http://www.energy.ca.gov/2005publications/CEC-500-2005-197/CEC-500-2005-197-SF.PDF>; CCCC, *Climate Change and Wildfire In and Around California: Fire Modeling and Loss Modeling* (Sacramento, CA: CCCC, 2006), <http://www.climatechange.ca.gov/research/impacts/climatewildfire.html>.
5. CCCC, *Climate Change and Wildfire*.
6. J. Hansen et al., “Climate change and trace gases,” *Phil. Trans. R. Soc.* 365 (2007):1925-1954.
7. CCCC, *Our Changing Climate, Assessing the Risks to California* (Sacramento, CA: CCCC, 2006), http://meteora.ucsd.edu/cap/pdf/files/CA_climate_Scenarios.pdf.
8. California Health & Safety Code § 38500 et seq.
9. Office of the Governor, “Gov. Schwarzenegger Signs Landmark Legislation to Reduce Greenhouse Gas Emissions,” press release, September 27, 2006, http://www.climatechange.ca.gov/documents/2006-09-27_AB32_GOV_NEWS_RELEASE.PDF.
10. California Health & Safety Code § 38505(i).
11. ICF International, *Estimating the State Fuel Tax Paid on Gasoline Used in the Off-Highway Operation of Vehicles for Recreation* (ICF International, September 2006).
12. Ibid., 6-11.
13. U.S. Environmental Protection Agency (EPA), Greenhouse Gas Equivalencies Calculator, <http://www.epa.gov/solar/energy-resources/calculator.html>.
14. Ibid. The calculation determines that gallons of gasoline consumed equals: heat content of gasoline * carbon coefficient * fraction oxidized * the ratio of molecular weight ratio of carbon dioxide to carbon. Average heat content of conventional motor gasoline is 5.22 million btu per barrel (EPA 2007). Average carbon coefficient of motor gasoline is 19.33 kg carbon per million btu (EPA 2007). Fraction oxidized to CO₂ is 100 percent (IPCC 2006). Therefore, for 1 gallon of gasoline consumed, greenhouse gas emissions are equal to: 5.22 mmbtu/barrel (heat content) * 19.33 kg C/mmbtu (C coefficient) * 1 barrel/42 gallons * 44 g CO₂/12 g C * 1 metric ton/1000 kg = 8.81*10⁻³ metric tons CO₂/gallon.
15. California Department of Parks and Recreation, *Public Opinions and Attitudes Towards Outdoor Recreation in California 2002* (Sacramento, CA: California Department of Parks and Recreation, December 2003).
16. ICF International, *Estimating the State Fuel Tax*, 6-8. 17. *Science Daily*, “Despite Lower CO₂

Emissions, Diesel Cars May Promote More Global Warming Than Gasoline Cars," *Science Daily*, Oct. 22, 2002, <http://www.sciencedaily.com/releases/2002/10/021022071123.htm>.

18. Mark Z. Jacobson, "Control of fossil-fuel particulate black carbon and organic matter, possibly the most effective method of slowing global warming, *Journal of Geophysical Research* 107 (2002).

19. California Air Resources Board staff, *California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit* (Sacramento, CA: California Air Resources Board, November 16, 2007).

20. California Department of Parks and Recreation, *Public Opinions and Attitudes Towards Outdoor Recreation in California 2002*, 26.

21. Ibid.

22. 67 Fed. Reg. 68242. Supporting documents to the 2002 rule may be found online at: <http://www.epa.gov/oms/recveh.htm>.

23. The State of California petition is available online at: http://ag.ca.gov/cms_attachments/press/pdfs/n1522_finaldraftnonroadpetition3.pdf.

24. State of California Off-Highway Motor Vehicle Recreation Division, *Taking the High Road: The Future of California's Off-Highway Recreation Program* (Sacramento, CA: State of California Off-Highway Motor Vehicle Recreation Division, 2002).

25. Ibid.

26. Ibid., 5-20.

27. J.J. White, J. N. Carroll, J. G. Lourenco, and A. D. Iaali, "Baseline and Controlled Exhaust

Emissions from Off-highway Vehicle Engines," presented at the Small Engine Technology Conference. Pisa, Italy, 1993.

28. Physicians for Social Responsibility, *Protecting Health, Preserving the Environment and Propelling the Economy: An Environmental Health Briefing Book* (Physicians for Social Responsibility, 2006), <http://www.psr.org/site/DocServer/PSREH2007.pdf?docID=1121>.

29. M. Kasnitz, and E. Maschke, *Backcountry giveaways: How Bureaucratic Confusion Subsidizes Off-highway Vehicle Harm: A Report for the California Green Scissors Project* (Santa Barbara, CA: CALPIRG, 1996), citing California Air Resources Board, *Program Update for Off-highway Motorcycles and ATVs* (El Monte, CA: CARB, 1996).

30. L.M.S. Fussell, "Exposure of snowmobile riders to carbon monoxide: Emissions pose potential risk," *Park Science: Integrating Research and Resource Management* 17, no. 1 (1997): 8-10; R.E. Killman, S. S. Lestz, and W. E. Meyer, *Exhaust Emissions Characteristics of a Small 2-stroke Cycle Spark Ignition Engine* (New York: Society of Automotive Engineers and Pennsylvania State University, 1973) C.S. Sluder, *Development of a Method for Determining Exhaust Emissions and Fuel Consumption of Vehicles in On-road Operation* (Knoxville, TN: University of Tennessee, 1995).

31. EPA, *Environmental Fact Sheet, Frequently Asked Questions: Environmental Impacts of Recreational Vehicles and Other Nonroad Engines* (2001: EPA), <http://www.epa.gov/oms/regs/nonroad/proposal/f01030.htm>.

32. Ibid.

33. EPA, *Environmental Fact Sheet, Frequently Asked Questions: Emission Standards for All-Terrain Vehicles (ATVs)* (Ann Arbor MI: Office

- of Transportation and Air Quality, EPA 420-F-01-027, 2001).
34. California Air Resources Board, *Program Update for Off-Road Motorcycles and ATVs*, <http://www.arb.ca.gov/msprog/offroad/mcfactst.htm> (accessed February 3, 2008).
35. J. Schwartz, "Air pollution and children's health," *Pediatrics* 113, (2004): 1037-43, suppl. no. 4.
36. C-C Chan, T-H Wu, "Effects of Ambient Ozone Exposure on Mail Carriers' Peak Expiratory Flow Rates," *Environmental Health Perspectives* 113 (2005):735-738; I.B. Tager et al., "Chronic Exposure to Ambient Ozone and Lung Function in Young Adults," *Epidemiology* 16 (2005):751-759.
37. EPA, *Environmental Fact Sheet, Frequently Asked Questions: Environmental Impacts of Recreational Vehicles and Other Nonroad Engines*.
38. Linda Hansen, *Final Environmental Impact Statement for the Imperial Sand Dunes Recreation Area Management Plan and Proposed Amendment to the California Desert Conservation Plan 1980*, DOI, BLM/CA/ES-2003-017 + 1790 – 1600, May 2003, 209.
39. American Lung Association, *State of the Air: 2007*, http://lungaction.org/reports/sota07_full.html.
40. Ibid.
41. Ibid.
42. Ibid.
43. Physicians for Social Responsibility, *Degrees of Danger: How Smarter Energy Sources Can Protect our Health in California* (Physicians for Social Responsibility, 2003) http://www.psr.org/site/DocServer/Degrees_of_Danger_California.pdf?docID=544
44. EPA, *What are the Six Common Air Pollutants?* <http://www.epa.gov/air/urbanair/>.
45. R. Bascom R et al., "State of the Art: Health Effects of Outdoor Air Pollution, Parts 1&2," *American Journal of Respiratory and Critical Care Medicine* 153 (1996):3–50; 477–98.
46. S. Janssen and T. Schettler, *Health Implications of Snowmobile Use in Yellowstone National Park*, http://www.womenandenvironment.org/Health_Imp_snow.pdf.
47. a) D.W Dockery et al., "An Association Between Air Pollution and Mortality in Six U.S. Cities," *New England Journal of Medicine* 329 (1993):1753–59. b) A. Seaton A. et al., "Particulate Air Pollution and Acute Health Effects," *Lancet* 345 (1995): 176–8.
48. EPA, *September 2003 Report: National Air Quality and Emissions Trends Report, 2003 Special Studies Edition, Table A-8, National PM2.5 Emissions Estimates, 1990–2000*.
49. J.K. Nakata et al., "Origin of Mojave Desert dust plumes photographed from space," *Geology* 4 (1976): 644-648.
50. American Lung Association, *State of the Air: 2007*.
51. Ibid.
52. EPA, *EPA Greenbook: Nonattainment Status for Each County By Year* (EPA, 2007), <http://www.epa.gov/oar/oaqps/greenbk/ancl.html> (accessed February 8, 2008).
53. American Lung Association, *State of the Air: 2007*.
54. J.M. Samet, et al., "The National Morbidity, Mortality, and Air Pollution Study. Part I: Methods and Methodologic Issues," *Health Effects Institute Research Report* 94, Part I

(May 2000); J.M. Samet, et al., "The National Morbidity, Mortality, and Air Pollution Study. Part II: Morbidity, Mortality and Air Pollution in the United States," *Health Effects Institute Research Report* 94, Part II (June 2000).

55. M. Lippmann, et al., "Association of Particulate Matter Components with Daily Mortality and Morbidity in Urban Populations," *Health Effects Institute Research Report* 95 (August 2000).

56. M.J. Lipsett et al., "Coarse Particles and Heart Rate Variability among Older Adults with Coronary Artery Disease in the Coachella Valley, California," *Environmental Health Perspectives* 114, no. 8 (2006): 1215-1220; A. Peters et al., "Increases in Heart Rate During an Air Pollution Episode," *American Journal of Epidemiology* 150 (1999): 1094-8; A. Peters et al., "Increased Plasma Viscosity During an Air Pollution Episode: A Link to Mortality," *Lancet* 350, no. 9185 (1997): 1582-7; A. Seaton et al., "Particulate Air Pollution and the Blood," *Thorax* 54, no. 11 (1999): 1027-32; A. Peters et al., "Air Pollution and Incidence of Cardiac Arrhythmia," *Epidemiology* 1, no. 11 (2000): 11-7; Joel Schwartz, "Air Pollution and Hospital Admissions for Heart Disease in Eight U.S. Counties," *Epidemiology* 10 (1999): 17-22; N. Kunzli et al., "Public Health Impact of Outdoor and Traffic-Related Air Pollution: A European Assessment," *Lancet* 356 (2000): 795-801; K. Ito, "Associations of particulate matter components with daily mortality and morbidity in Detroit, Michigan, in: *Revised Analyses of Time-Series Studies of Air Pollution and Health, Special Report* (Boston, MA: Health Effects Institute, 2003), 143-156; T.F. Mar et al., "Air pollution and cardiovascular mortality in Phoenix, 1995-1997," in: *Revised Analyses of Time-series Studies of Air Pollution and Health, Special Report* (Boston, MA: Health Effects Institute, 2003); 177-182, <http://www.healtheffects.org/Pubs/TimeSeries.pdf> (accessed October 18, 2004); B.D. Ostro, B. D., R. Broadwin, M.J. Lipsett, "Coarse particles and daily mortality

in Coachella Valley, California," in: *Revised Analyses of Time-series Studies of Air Pollution and Health, Special Report* (Boston, MA: Health Effects Institute, 2003), 199-204, <http://www.healtheffects.org/Pubs/TimeSeries.pdf> (accessed October 18, 2004); B. Ostro et al., "Fine particulate air pollution and mortality in nine California counties: results from CALFINE," *Environmental Health Perspectives* 114 (2006): 29-33; A. Zanobetti, J. Schwartz, and D. Gold, "Are There Sensitive Subgroups for the Effects of Airborne Particles?" *Environmental Health Perspectives* 108, no. 9 (2000): 841-8450.

57. Physicians for Social Responsibility, *Degrees of Danger*.

58. 65 FR 76790, December 7, 2000.

59. EPA, *Environmental Fact Sheet, Frequently Asked Questions: Emission Standards for All-Terrain Vehicles (ATVs)*.

60. EPA, Greenhouse Gas Equivalencies Calculator, <http://www.epa.gov/solar/energy-resources/calculator.html>.

61. NAAQS Standards, <http://www.epa.gov/air/criteria.html>

62. EPA, *Emission Standards for New Nonroad Engines, regulatory announcement* (Washington, DC: EPA, 2002), EPA420-F-02-037.

63. Ibid.

64. EPA, *Particulate Matter (PM-10) Nonattainment State/Area/County Report as of December 20, 2007*, <http://www.epa.gov/oar/oaqps/greenbk/pncs.html>.

65. EPA, *Region State Ozone Designations (as of January 15, 2008)*, <http://www.epa.gov/ozonedesignations/regions/region9desig.htm>.

66. Hansen, *Final Environmental Impact Statement for the Imperial Sand Dunes Recreation*

Area Management Plan, 213.

67. K. Martinez, and C. Kitzman, *Second Community Survey Report Imperial County & Mexicali, Clean Air Initiative* (2005), http://www.lungsandiego.org/environment/article_imperial_mexicali.asp.

68. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards Emissions, Monitoring, and Analysis Division, *The Particle Pollution Report: Current Understanding of Air Quality and Emissions Through 2003* (EPA, 2003), www.epa.gov/air/airtrends/aqtrnd04/pmreport03/report_2405.pdf. The Environmental Protection Administration says that significant harm to health occurs when the air contains more than 600 micrograms of particulate matter per cubic meter during a 24-hour period.

69. American Lung Association, *State of the Air: 2007*.

70. Alberto Mendoza, Marisa R. García, and Erik I. Pardo, *Air Quality Information Catalogue for the Mexicali-Imperial Valley Border Region, Draft Final Report* (Mexicali-Imperial Valley Air Quality Modeling and Monitoring Program in Support of LASPAU's Border Ozone Reduction and Air Quality Improvement Program, 2004).

71. P.B. English et al., "Childhood asthma along the United States/Mexico border: hospitalizations and air quality in two California counties," *Pan American Journal of Public Health* 3, no. 6 (1998).

72. J.K. Stockman et al., *California County Asthma Hospitalization Chart Book: Data from 1998-2000* (Oakland, CA: California Department of Health Services, Environmental Health Investigations Branch, 2003).

73. Ibid.

74. P.B. English et al., "Childhood asthma."

75. Hansen, *Final Environmental Impact Statement for the Imperial Sand Dunes Recreation Area Management Plan*, 213.

76. Final Regulation Order: Article 3, Chapter 9, Division 3, Title 13, California Code of Regulations, <http://www.arb.ca.gov/regact/recreat/recreat.htm> (accessed February 6, 2008).

77. Title 13, Division 3, Chapter 9, Article 3, <http://www.oal.ca.gov/ccr.htm> (accessed February 6, 2008).

78. Title 13, Division 3, Chapter 9, Article 3, <http://www.oal.ca.gov/ccr.htm> (accessed February 6, 2008).

79. Final Regulation Order: Article 3, Chapter 9, Division 3, Title 13, California Code of Regulations, <http://www.arb.ca.gov/regact/recreat/recreat.htm> (accessed February 6, 2008).

80. Seasonal riding areas available at: <http://ohv.parks.ca.gov/pages/1234/files/2007%20CARB%20Revised%20Riding%20Seasons.pdf>

81. "Effective July 15, 2003, New Noise Standards, Red Sticker Registration to be Enforced at All California Off-Highway Riding Areas," news release, <http://www.parks.ca.gov/pages/712/files/070903.pdf> (accessed February 6, 2008).

82. For an overview of off-road vehicle impacts in California, see California Wilderness Coalition, *Off-Road to Ruin: How Motorized Recreation is Unraveling California's Landscapes* (Davis, CA: 2001).

83. California Department of Parks and Recreation, *Public Opinions and Attitudes Towards Outdoor Recreation in California 2002*, 26-27.

84. Ibid.

85. D.G. Havlick, *No Place Distant: Roads and*

Motorized Recreation on America's Public Lands (Washington, D.C.: Island Press, 2002).

86. Michigan State University Automotive Research Experiment Station, *Small Engine Emissions Emissions of Off-highway and Utility Engines* (East Lansing, MI: Michigan State University, 2007), <http://www.egr.msu.edu/erl/Small%20Engine%20Emissions.html>; D.S. Ouren et al., *Environmental Effects of Off-highway Vehicles on Bureau of Land Management Lands: A Literature Synthesis, Annotated Bibliographies, Extensive Bibliographies, and Internet Resources* (Reston, VA: U.S. Geological Survey, 2007), U.S. Geological Survey Open-File Report 2007-1353, <http://www.fort.usgs.gov/products/publications/22021/22021.pdf>.

87. Havlick, *No Place Distant*.

88. Mike Dombeck, *Approaches to Watershed Restoration and Community Sustainability*, presentation by chief of USDA Forest Service to Large-Scale Watershed Restoration Forum, November 2, 2000.

89. 68 Fed. Reg. 27578.

90. R. A. Zampella, "Characterization of surface water quality along a watershed disturbance gradient," *Water Resources Bulletin* 30 (1994): 605-11.

91. Bureau of Land Management (BLM), *Furnace Creek Environmental Assessment* (BLM, 2007), 58-89.

92. *California Critical Coastal Areas Report*, 2006, http://www.coastal.ca.gov/nps/Web/cca_pdf/sfbaypdf/CCA92PetalumaRiver.pdf.

93. Ibid.

94. National Wildlife Federation, *Paving Paradise: Sprawl's Impact on Wildlife and Wild Places in California* (San Diego, CA: National Wildlife Federation, 2001).

95. BLM California State Office, grant application to State of California (BLM, 2000).

96. For details on the state's off-highway vehicle program, see <http://ohv.parks.ca.gov/>.

97. State of California Off-Highway Motor Vehicle Recreation Division, *Taking the High Road*.

98. See http://ohv.parks.ca.gov/?page_id=24436.

99. Data provided by California State Parks, Off-Highway Motor Vehicle Recreation Division, 2008.

100. *California State Parks' Response to Climate Change* (2007), <http://ohv.parks.ca.gov/pages/1140/files/09-11-07revisedohmvrcommissionclimatechangesynopsis.pdf>.

101. Government Accounting Office, *Federal Lands: Information on the Use and Impacts of Off-Highway Vehicles* (Government Accounting Office, RCED-95-209, 1995).

102. 65 FR 76790, December 7, 2000.

103. Off-Highway Motor Vehicle Recreation Division, *OHV Grant Application History for U.S. Forest Service* (Sacramento, CA: Off-Highway Motor Vehicle Recreation Division, 1999).

104. Ibid.

105. Off-Highway Motor Vehicle Recreation Division, Grants and Cooperative Agreements Program, *OHMVR Commission Final Results*, http://ohv.parks.ca.gov/?page_id=1164.

106. 36 CFR 212.

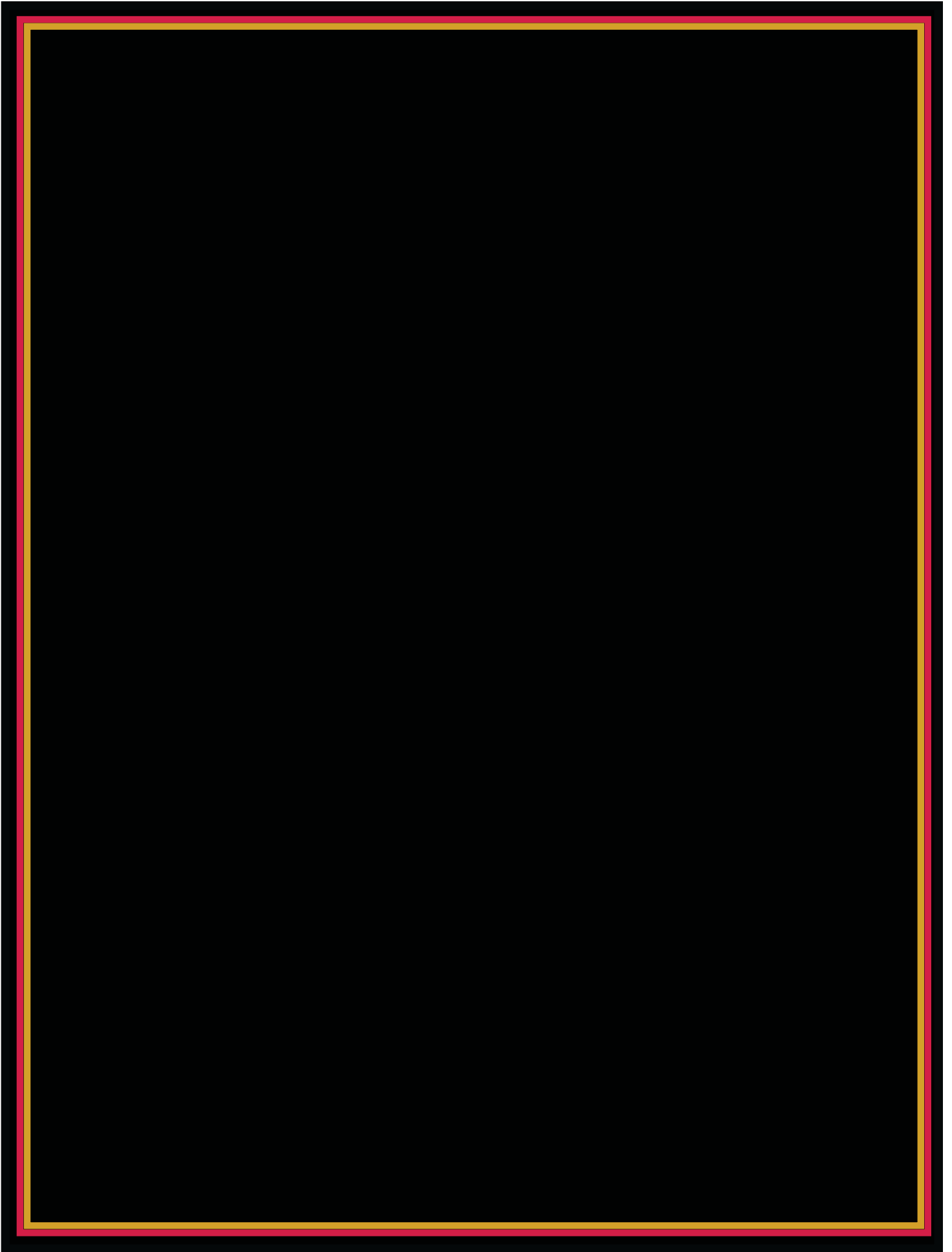
107. Information compiled from individual Web sites for each state vehicular recreation area, national forest, and Bureau of Land Management unit.

108. The Bureau of Land Management field offices in California are: Alturas, Arcata, Bakersfield, Barstow, Bishop, Eagle Lake, El Centro, Hollister, Needles, Palm Springs/South Coast, Redding, Ridgecrest, and Susanville. Some of the information in this section of the appendix was found on individual Bureau of Land Management sites and some was obtained from the Sand Dune Guide, <http://www.duneguide.com/>.



Pristine area in the Trinity Alps, California

Photo by Chris Kassar



FAX TRANSMITTAL FORM

To: Ramp Team Leader
BLM

From: HERB ENGEL

Date Sent:

Fax no. 406-854-2205

Phone: 406-854-2205

Number of Pages:

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6

Message:

Imperial Sand Dunes

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BLM OFFICE
EL PASO, TX

AUG 6, 2010

RAMP Team Leader
Bureau of Land Management
1661 S Fourth Street
El Centro, CA 92243

Subject: Comments on the March 2010 Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Recreation Area (ISDRA)

Dear RAMP Team Leader

I am writing to you as a voting resident of State of California and avid off-roader. My family and I have enjoyed off-roading as a recreational sport for almost 40 years and intend to do so for many years to come.

Although I applaud the BLM's efforts to implement the ISDRAMP, I feel the DRAMP has serious deficiencies. Specifically numerous proposed actions and recommendations which are not supported by data suitably related to the proposal. The DRAMP is full of superficial and incomplete data particularly in the coverage of the biology and ecology of the PMV. The BLM has chosen to ignore a large body of published information and data regarding the distribution and ecology of the PMV. This omission renders many of the DRAMP recommendations invalid.

The rainfall-triggered camping closure of Dunebuggy Flats (DBF) lacks sufficient rational to support such a drastic measure. This proposal presumes that BLM is incapable of enforcing the closures. This proposal ignores historical closure compliance and assumes that BLM cannot provide the required enforcement resources. Likewise, the camping closure on the east side in the microphyll woodland habitat has no supporting evidence that historical camping has damaged the habitat or otherwise affected species that reside in this habitat. Appendix "O" regarding bird populations provides no conclusive evidence in support of a camping closure.

I have reviewed the DRAMP and of all of the alternatives discussed I prefer Alternative 1. However, I realize this may not be acceptable to certain constituents and therefore I would like to propose another alternative. Some of the other alternatives, notably Alternatives 7 and 8, each have attractive features which could be combined into a potentially effective hybrid. Use Alternative 7 as the basis, but substitute the irregular boundaries of the Alternative 8 proposed Pierson's Milk Vetch (PMV) critical habitat (CH) closures. In addition, increased signage, and law enforcement during threshold rainfall years, along with clearly marked pass-through corridors would provide a more manageable alternative.

August 5, 2010

Page 2

DRAMP Comments

The need for public safety CH pass-through corridors is imperative. The preferred CH boundaries do not consider the topography of the dunes as it relates to public safety and increases the possibility for inadvertent incursion. I would further refine this alternative to remove geothermal or mineral leasing from all areas of the ISDRA or place restriction such that these activities do not contribute to a loss of recreational area. The ISDRA is a truly unique recreational area that cannot be found elsewhere. If geothermal leasing is allowed, directional drilling or other restrictions to ensure continued OHV must be required.

Another realistic approach would be amending Alt 8 as follows:

Allow camping from Wash 25 to Wash 69

Allow camping North of Grays Well


Revise the closure boundary around the CH in Alt 8 (ref map 2-26) to take on a more realistic, well marked shape which protects the CH, but allows access and use of Patton Valley. Provide access corridors from the sand highway to the open dunes. This will assist duners identify where the closure is and isn't located and will provide access for emergency personnel and first responders too.

In addition to the above, I'd like to request the BLM assess offsetting impacts to PMVCH within the ISDRA proposed above by establishing mitigation sites within the closed area north of highway 78 by creating PMV habitat where it currently doesn't exist. This concept, known as "on-site mitigation" is a common regulatory practice and has been implemented successfully throughout the country. The mitigation could be further encouraged by initiating a 1.5:1 ratio. This proposed addition has the potential to be a win win for all parties

I respectfully request that the Bureau of Land Management (BLM) consider and assess these alternatives in the Final EIS. The request for consideration of a "hybrid" alternative is provided in response to the last sentence on the first page of the DRAMP "Abstract" which states ***"The proposed decisions under this alternative (# 8) could be identical to those under one of the other alternatives presented or could be a combination of the features from several of the alternatives"***.

The above summarizes my concerns. However, attached to this letter are specific and detailed comments provided in support of my assertions. The ISDRA is known nationwide as an incredible venue for OHV recreation. Please consider my comments.

Yours Truly,


HERB ENGEL
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Attachment

PMV CH Areas

- 1) The closure of critical habitat (CH) to Off Highway Vehicles (OHVs) in the Mammoth Wash area, will result in a barrier between the east and west side of the open areas, increasing the chance of incursions into the CH. To address this problem, the Bureau of Land Management (BLM) should establish two or three vehicle paths or corridors through this CH area to allow vehicles to travel between the east and west open areas. Without designated connecting corridors, OHVs may inadvertently travel through the CH areas at many different locations, potentially affecting PMV. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.
- 2) In the south dunes adjacent to the Dune Buggy Flats campground, the CH creates a barrier between the Sand Highway on the west and the open area on the east. This barrier may result in incursions through the CH. As in the Mammoth Wash area discussed above, this problem could be eliminated by establishing travel corridors through this CH area every ½ mile. The corridors will allow for vehicle connections between the sand highway and the east open area. In addition, the travel corridors would permit emergency vehicles to access the open areas. Without designated connecting corridors, OHVs may inadvertently travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.
- 3) If the BLM's intent is to have increased protection to the already closed CH areas, please evaluate increased signage and law enforcement of closed CH areas rather than closing of recreation camping areas to provide your implied increased protection of the PMV. The increased law enforcement costs would be offset by the revenue that would be lost by closing Dunebuggy flats. Increased closure signage would go a long way to preventing the inadvertent incursions that this campground closure seems to be trying to prevent.
- 4) Data from referenced studies show that many plants consistently show increased population in areas open to OHV recreation. This has been shown in the BLM PMV monitoring and the Luckenbach and Bury report on page H-8. The report states "...the data collected shows that PMV density and cover were actually higher in the OHV area than in the closed area..." It seems that neither the BLM nor FWS can explain why these plants seem to do better in areas open to OHV than in areas closed to OHV recreation. Data such as this would question the advisability and need to restrict camping in areas adjacent to the proposed closed areas. If BLM has the data, but it wasn't included, and still intends to close DBF as a result of this data, then alternate camping areas must be made available so as not to additionally strain the other camping areas.

Camping Area Closures/Recreational Capacity

- 1) Visitor capacity was addressed in the 2003 RAMP, but none of that information was carried over to the DRAMP. In other words, the BLM didn't properly analyze the alternatives when it comes to visitor capacity. The recreation portion of this plan and EIS is very general and lacks a thorough analysis. As a result, one of the more critical components in recreation management, visitor capacity, was not properly addressed. It is impossible for the public, local stakeholders, or cooperating agencies to understand what the proposed visitor capacity is across each alternative starting with the No Action, let alone evaluate the effects of the proposed alternatives. Considering the on-going issues with overcrowding and the potential for more depending upon the alternative selected, I believe this DRAMP is unacceptable, is in violation of BLM planning regulations, and not legally sufficient in terms of the Administrative Procedures Act and the National Environmental Policy Act.
- 2) The DRAMP proposes to restrict camping in Dunebuggy Flats (DBF) when a certain rainfall threshold is met, presumably to provide additional protection for the PMV. However, neither the camping closure nor the rain threshold which would trigger it are supported by technical studies or related data. A proposed camping restriction of this magnitude must have some scientific basis before it can be considered for adoption and implementation. For example, BLM must demonstrate why it believes the proposed rainfall threshold is correlated to increased PMV production. Likewise, BLM must demonstrate why it believes the proposed camping restriction is needed during these rain events to ensure PMV reproductive success. So far, no such demonstration has been made. As a result, the proposed camping closure in DBF should be removed from consideration.
- 3) The DRAMP proposes to eliminate camping on the east side of the ISDRA from Wash 25 to Wash 69. According to the DRAMP, this closure is necessary to protect the microphyll woodland habitat that exists in this area. While we recognize the value in protecting this important habitat type, the proposed camping closure is too large and not supported by technical or scientific evidence. Specifically, there is no data showing that camping in the microphyll woodland has damaged the habitat or otherwise affected the species that use or reside in the habitat. The only evidence provided in support of the proposed closure is the PRBO Bird Study, attached as Appendix O to the DRAMP. This study did not address camping impacts, but rather focused exclusively on OHV-related impacts. In addition, the Bird Study, by its own admission, is fraught with defects in its methodology. (See discussion of Appendix O, below.)

4) The study's authors acknowledge that the microphyll woodland in the open area is not as dense as that in Wilderness Area, but it nevertheless supports a great many birds species and is considered high value habitat...even with continued recreational use. The study also determined that the microphyll woodland in the Wilderness Area contained an unusually high number of birds; a finding which, according to the study's authors, may have been caused by surveyor error. For these reasons, it is unfair and scientifically misleading to suggest that the microphyll woodlands in the open area have somehow been damaged by recreational uses. There is no valid scientific data to support such a closure as proposed in Alt 8. Please provide any relevant peer reviewed scientific data that would support a closure. If no such data exists, the proposed camping closure at Washes 25 through 69 should be eliminated from further consideration. If data exists, please consider a reduced closure so as not to eliminate camping availability and implement a management plan to ensure the sustainability.

Other Alternatives

1) The preferred alternative, Alt 8, calls for closure of all areas designated as PMV CH. This includes an area near Mammoth Wash and an area from the central dunes south towards Dunebuggy Flats. The proposed central dunes closure is very irregular in shape. Marking this area would be difficult and confusing. Likewise, the lack of pass-through corridors for miles and miles would make travel between the sand highway and the open dunes difficult. This would be confusing to OHVs and law enforcement.

2) As an alternative to the CH closures proposed in Alt. 8, I suggest a smoothed boundary around the main body of the CH, eliminating the irregular shape, but still maintaining access to Patton Valley. Unlike the temporary closures, the boundaries should follow the natural lines of the dunes to ensure safety and clarity. This new smoothed boundary would not need to be as wide as the closures in Alt. 5 and 7, because the eastern portion of those areas is beyond the PMV CH boundary and lacks significant PMV populations.

3) Clearly marked pass-through corridors should be established every half-mile to mile along the central closure to allow OHVs to access open areas to the east from the Sand Highway. This not only minimizes the potential for accidental incursion into the CH, but it also provides an access for law enforcement, safety, and first responders the ability to efficiently access the dunes. It will not be difficult to locate areas that can be safely traversed without PMV; lateral sand ridges are frequent in the area and are currently used without affecting any PMV plants. This also eliminates the necessity of rainfall-induced closure of DBF, as the potential to inadvertently enter closed CH area will be virtually eliminated by having regularly distributed designated crossings. Once again, the boundaries of the closure and the pass-through corridors must be clearly marked and maintained.

From: [Volpone, Michael A](#)
To: caisdrmp@ca.blm.gov
Subject: Outdoor Enthusiasts Opinion
Date: 08/02/2010 05:54 PM
Importance: High
Attachments: [Stemmin42p10080216230.pdf](#)

BLM

Erin Dreyfuss

As an outdoor enthusiasts it has been dis-hearting to see the closure of certain parts of the ISDRA due to the PMV over the last many of years. I have attached information conducted by an author Dr. Phillips, BLM studies too that pertain to the the study of the PMV in an open OHV area. This study, which is peer reviewed is sound and is a real indication of what is really happening in the ISDRA in regards to the PMV growth. This data should be considered by the BLM land use policy makers in opening much of the closed CH to OHV at this point. I have highlighted the critical information and attached a addendum comments to the 2010 ISDRA DRAMP graph for your reference. In closing, per the studies - the majority of the CH closed to OHV is not justifiable to based upon the current review of the area.

Thanks for taking my comments.

Michael Volpone

39580 Glenwood Ct

Murrieta CA 92563



Please consider the Environment before printing this email

----- Message from <temmin42p@av.abbott.com> on Mon, 2 Aug 2010 17:23:46 -0700 -----

To: "Volpone, Michael A" <michael.volpone@av.abbott.com>
Subject: Message from temmin42p

From: [BRYCE K WAITE](#)
To: caisdrmp@ca.blm.gov
Subject: Public Comments on the Draft Imperial Sand Dune Recreation Management Plan
Date: 08/04/2010 01:53 AM

Ms. Dreyfuss,

I am writing today to add my comments to the Imperial Sand Dune Recreation Management Plan. My family and I have been visitors to the ISDRA for more than 20 years. My children have grown up playing in the sand. It is not uncommon for our group to consist of 20 or more families camping together, celebrating holiday's together, and enjoying the outdoors together. I am concerned that more and more of our recreating area is being closed, access is being limited and we are forced to camp and recreate in a smaller more confined area increasing the risks of safety due to the number of people being forced into a smaller area. I am not asking for more established camp grounds or improvements to the area, only access to the areas that our families have grown to enjoy. We are responsible campers and area users. Our philosophy is to leave the area cleaner than we found it, pack it in, pack it out, and to not only respect the land, but law enforcement as well. Back in the 1970's, a large portion of the ISDRA was closed north of Highway 78 for preservation. It concerns me that the current closures south of Highway 78 were the result of a lack of a current RAMP and based on nothing more than a lawsuit filed by the Center for Biological Diversity without any scientific backing. I would like you to consider the following points in determining the outcome of the recreation area management plan.

1. The DRAMP is fraught with superficial and incomplete data.

BLM has chosen to ignore the work of Dr. Art Phillips III. His work is comprised of a large body of published information and data regarding the distribution and ecology of the PMV. This is peer-reviewed science. More importantly, his studies were conducted in areas open to OHV operations that document PMV and OHVs can co-exist. This omission renders many of the DRAMP recommendations invalid.

Following are the references to the seven reports. These were sent annually to BLM in El Centro and FWS in Carlsbad, as well as other agencies. It is my understanding that ASA has recently sent electronic copies to BLM in case hard copies are missing from files.

Phillips, A. M., III, D. J. Kennedy, and M. Cross. 2001. Biology, distribution, and abundance of Peirson's milkvetch and other special status plants of the Algodones Dunes, California. Report submitted by Thomas Olsen Associates, Inc. to the American Sand Association. 29 p. ("TOA 2001")

Phillips, A. M., III and D. J. Kennedy. 2002. The Ecology of *Astragalus magdalenae* var. *peirsonii*: Distribution, reproduction and seed bank. Report submitted to the American Sand Association. 41 p.

Phillips, A. M., III and D. J. Kennedy. 2003. The Ecology of *Astragalus magdalenae* var. *peirsonii*: Germination and survival. Report submitted to the American Sand Association. 27 p.

Phillips, A. M., III and D. J. Kennedy. 2004. The Ecology and Life History of Peirson's Milkvetch in the Algodones Dunes, California: 2003-2004. Report submitted to the American Sand Association.

Phillips, A. M., III and D. J. Kennedy. 2005. The Life History of Peirson's Milkvetch (*Astragalus magdalenae* var. *peirsonii*) in the Algodones Dunes,

From: [Stella M. Aleman de Gallardo](#)
Reply To: Stellafetia@aol.com
To: caisdrmp@ca.blm.gov
Subject: Protect the Algodones Dunes
Date: 07/30/2010 07:57 PM

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

Stella M. Aleman de Gallardo
73-01 41 Ave #5E
Woodside, ND 11377-3023
US

CBD PLUS COMMENTS

PostedDate: 07/22/2010 12:54:30 PM
From: Janet Foster <jwf267@yahoo.com>
ReplyTo: jwf267@yahoo.com
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

88,000 acres of ORV-accessible landscapes already exist in the Algodones Dunes and there is no rational reason to expand this at the cost of the existence of rare plants and animals.

The Algodones Dunes is a national treasure of unique biodiversity in one of the most arid regions in the country. The dune system and the exceptional plants and animals that require this harsh environment need the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are, simply, a foolish and wasteful inappropriate use for more of the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I strongly oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

What might make much better sense than expanding ORV use of this fragile area would be to institute expensive fees for ORV presence there. Turn the area that is already used for ORV into a paying park.

Janet Foster
2002 Cromwell Br Rd
Parkville, MD 21234

US

PostedDate: 07/22/2010 01:52:13 PM
From: Ellen Gachesa <trueromanticlife@hotmail.com>
ReplyTo: trueromanticlife@hotmail.com
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

Think about it...I mean really THINK. Is letting a few selfish, fossil-fuel burning, polluting vehicle hobbyists ruin vast swaths of wilderness REALLY worth the extinction of even ONE beautiful, extraordinary creature? The planet will spew out millions more human idiots, but once a species is extinct - it's gone for good. REMEMBER - the ecosystem works TOGETHER. Allowing the extinction of multiple species by human rampage is simply NOT worth the damage it causes to the entire ecosystem. You may not think it will affect YOU - but when there are no more fish to eat, no more birds, butterflies and bees to pollinate our crops, it affects ALL of us. STOP THE CARNAGE!!

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

Ellen Gachesa
1247 Monticello Road
Napa, CA 94558
US

PostedDate: 07/22/2010 04:07:42 PM
From: Gayle Janzen <cgjanzen@comcast.net>
ReplyTo: cgjanzen@comcast.net
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

It's astounding that our govt. continue to ignore fragile habitats like the Algodones Dunes and wants to open them up to even more ORVs. Why on earth do you want to destroy even more of this precious landscape and make it so much harder for many endangered animals and plants who live there to be able to survive these dangerous vehicles? There is already 88,000 acres available for off-roaders so adding 40,000 more is totally unnecessary and obviously yet another pander to a lucrative lobbying industry. This is something I would have expected from the Bush Administration, but obviously, Sec. Salazar is just another big business backer who cares only about money.

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

Gayle Janzen
11232 Dayton Av N
Seattle, WA 91833
US

PostedDate: 07/22/2010 04:25:47 PM
From: Robert Cerello <dionor8@yahoo.com>
ReplyTo: dionor8@yahoo.com
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

The Algodones Dunes is a national treasure of biodiversity, located in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation.

Massive amounts of unrestricted off-road vehicle (ORV) activities are an insanely inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals.

I urge the BLM's leaders to consult scientists and to refuse absolutely to roll back environmentally protective measures put in place a decade ago precisely to benefit the unique dunes ecosystem.

The BLM's scientific advisors should help leaders to consider a more equitable balance between uses at the Algodones Dunes and conserve at least half or more of the dunes for the rare species and habitats that have lived there for thousands of years.

I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide. They cannot survive neglect, excuses, evasions nor lawbreakings that destroy irreplaceable wildlife areas and flora and fauna and organisms, etc., etc.

In what unadviser to extremely noisy ORVs and their thrill-seeking owners matter more than the wildlife, and vital ecosystems whose quiet, remoteness and unspoiled beauty's appeal drew these destructive nuisances there in the first place?

We as citizens are sick of hearing the same attitude we heard under pseudo-religious neocons, attitudes that are scofflaw evasions and cave ins to opponents of national parks, attackers of their protected ecosystems and opponents of the science needed to manage them wisely, as you know you can and should be doing., Neocon postmodernists are good at only one thing, since they refuse to deal with reality--making loud noises that annoy but never convince adult minds. Do not listen to them. For the sake of your careers as well as the safety of the wildlife you are given power solely to protect, as the representatives of all of the U.S.'s citizens, whose heritage they are.

Robert Cerello
8070 Orange Avenue Apt. 705
La Mesa, CA 91942-6473

US

PostedDate: 07/22/2010 05:47:48 PM
From: Kenneth Gibson <kennethtgibson@gmail.com>
ReplyTo: kennethtgibson@gmail.com
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve the vast majority of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

I find it unfathomable that humankind would set out to destroy the limited protected areas now established for the sole purpose of expanding motorized adventures. You would enhance the health and safety of all Americans by inviting them to park their vehicles at the roadside and walk through some of the existing off-road areas re-designated for people rather than vehicles of any stripe.

Please manage the land for the long term interests of future generations of citizens. Don't destroy the beautiful places in the world to satisfy the excesses of a few today.

Kenneth Gibson

Oakland, CA 94602
US

PostedDate: 07/22/2010 07:29:33 PM
From: Steve Trammell <wyldknight50@yahoo.com>
ReplyTo: wyldknight50@yahoo.com
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

As a kid growing up in Oklahoma, I enjoyed finding horned lizards in my yard. Today horned lizard cannot be found here in this part of the country. The related horned lizards in California should be protected from habitat destruction or future generations may never see the magnificent animal

Steve Trammell
10137 Bryan
Meeker, OK 74855

US

PostedDate: 07/22/2010 08:07:21 PM
From: James Cunningham <james.cunningham@earthlink.net>
ReplyTo: james.cunningham@earthlink.net
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

Can we please start acting like the Bushian Nightmare is truly over? The evil, destructive practices of that criminal administration should have ended already. Let's start using sound reasoning, real science, and common sense in forming and implementing public policy.

James Cunningham
938 Deacon Cir
Columbus, OH 43214

US

PostedDate: 07/22/2010 09:33:12 PM
From: antje fray <Elaan2@yahoo.com>
ReplyTo: Elaan2@yahoo.com
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

Rare wildlife and its habitat should have priority over people using ORVs.

antje fray
58 old north rd
washington, CT 06793
US

PostedDate: 07/22/2010 10:23:16 PM
From: Rachel Woodward <rwblog.woodward7@gmail.com>
ReplyTo: rwblog.woodward7@gmail.com
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

Please educate the people driving the ORV's in a way that would direct them away from this type of destruction. The sand dunes take years and years and years to grow. They are very problematic in recreating as well. They can provide years and years of support through tourism in CA but not if they are destroyed. I have watched New Jersey (cape may) for several years now try and recreate sand dunes for the protection of their shorelines. It is a painfully slow process that relies on Federal protection as well as Mother Nature. I grew up climbing the Dunes of Indiana only to have that nearly destroyed. I know first hand the uniqueness in education that the Algodones Dunes can provide to all as well as the protective home for the rare species and habitats.

Give the ORV's less sensitive areas to have fun and its a WIN WIN. Please do not allow any percentage of this extremely sensitive tract of nature go to waste. The Algodones Dunes is worth saving and fighting for!

Rachel Woodward
233 West Union St.
West Chester, PA 19382
US

PostedDate: 07/22/2010 11:04:23 PM
From: ANITA JENNINGS <ANITAJENNINGS@HOTMAIL.COM>
ReplyTo: ANITAJENNINGS@HOTMAIL.COM
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes -- especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide. FOR GOD'S SAKE, CONSERVE AT LEAST 50% OF THESE DUNES. THERE IS ABSOLUTELY NO JUSTIFICATION FOR EXPANDING THE ORV AREA----ONLY LOBBYING BY ORV OWNERS AND DEALERS. THE DESTRUCTION CAUSED BY THESE VEHICLES IS UNBELIEVABLE AND MOST OF THE DRIVERS COULD CARE LESS ABOUT RUNNING OVER AN ANIMAL, PLANT ETC. BE CLEAR ABOUT THE RESTRICTIONS. SANDDUNES HAVE VALUE AS DO WETLANDS---IT'S JUST NOT AS APPARENT. TAKE CARE OF OUR EARTH DON'T JUST USE AND DESTROY. WE CAN'T REPLACE OR RECREATE WHAT WE DESTROY.

ANITA JENNINGS
206 ALBANY
CLOVERDALE, CA 95425
US

From: [Karen Schambach](#)
Sent By: csnckaren@gmail.com
Reply To: csnckaren@gmail.com
To: caisdrmp@ca.blm.gov
Subject: Comments on ISDRA DRAMP/DEIS
Date: 08/09/2010 04:33 PM
Attachments: [PEER Comments ISDRA DEIS 8-9-10.pdf](#)

To whom it may concern,
Attached are PEER's comments on the Imperial Sand Dunes DRAMP/DEIS. Please confirm receipt of this document.
Thank you very much.

Karen Schambach
California Field Coordinator
P.O. Box 4057
Georgetown, CA 95634

**Public Employees for Environmental Responsibility
Comments on Draft Environmental Impact Statement
Imperial Sand Dunes
Draft Recreation Area Management Plan and
Draft Environmental Impact Statement**



"This site possesses exceptional value in illustrating the natural history of the United States."

Public Employees for Environmental Responsibility
P.O. Box 4057
Georgetown, CA 95634

August 9, 2010

RAMP Team Lead
Bureau of Land Management
El Centro Field Office
1661 S. 4th Street
El Centro, CA 92243

Submitted electronically to:
caisdrmp@ca.blm.gov

To whom it may concern:

Public Employees for Environmental Responsibility (PEER) is a 10,000 member national alliance of local, state and federal resource professionals working to protect the environment. PEER members include government scientists, land managers, environmental law enforcement agents, field specialists, and other resource professionals committed to responsible management of America's public resources. PEER has a long-standing interest in the Imperial Sand Dunes and in ensuring protection of its natural, cultural and geologic resources, as well as protecting the health and welfare of BLM and other federal and state employees who work there.

PEER thanks BLM El Centro staff for their efforts to develop the Imperial Sand Dunes Draft RAMP/Draft EIS (DEIS). We appreciate the complexity of the issues BLM faces as it tries to manage these amazing and sensitive lands for a multitude of uses, some of which pose the challenge of conflicting uses. But while we understand these challenges, we believe BLM has failed with this DEIS to provide the protection to this unique and sensitive place required by law and by the requisites of responsible stewardship.

I. Range of Alternatives is inadequate.

While Alternative 3 does the best job of protecting the natural and cultural resources, none of the alternatives adequately addresses habitat for Pierson's milkvetch, especially outside the designated Critical Habitat. Likewise, none of the alternatives addresses the carrying capacity of the planning area, either in respect to protecting the natural resources, or with respect to providing for public health and safety. None of the alternatives provide adequate access for non-motorized recreation. Therefore, the range of alternatives is inadequate.

II. The DEIS fails to acknowledge the National Natural Landmark designation of the Imperial Sand Dunes or to manage the dunes in accordance with the goals of the National Natural Landmark program.

We begin our comments with the photograph of the 1968 National Park Service plaque hidden behind the Cahuilla Ranger Station at the entry to Gecko Road in the Imperial Sand Dunes, to remind BLM decision-makers of two things: 1) Imperial Sand Dunes has been recognized by the Department of the Interior for almost fifty years as having “exceptional” natural history value; and 2) BLM has a duty to provide responsible stewardship to protect the natural resources of the dunes.

The goals of the National Natural Landmark program are to encourage the preservation of sites illustrating the geological and ecological character of the United States, to enhance the scientific and educational value of sites thus preserved, to strengthen public appreciation of natural history, and to foster a greater concern for the conservation of the nation's natural heritage.

It is therefore disappointing to note that the DEIS continues a BLM pattern of ignoring the designation of the ISDRA as a Registered Natural Landmark (RNL). Neither Section 1.4 (Planning Criteria/Legislative Constraints) nor Section 1.5 (Planning Process) address the RNL Designation. As a result, the ISDRA values that make it eligible for the RNL designation are given short shrift.

According to the National Park Service, the ISDRA “is an outstanding example of dune geology and ecology in an arid land.” (See http://www.nature.nps.gov/nnl/Registry/USA_Map/States/California/NNL/ISH/index.cfm)

36 CFR 62.6 (f) requires: *Federal agencies should consider the existence and location of designated national natural landmarks, and of areas found to meet the criteria for national significance, in assessing the effects of their activities on the environment under section 102(2)(c) of the National Environmental Policy Act (42 U.S.C. 4321).*

The DRAMP and DEIS fail to even mention the RNL designation. The final DRAMP and EIS should remedy this by a full discussion of the significance of the RNL designation, the resources in the ISDRA that led to the designation, and how each alternative protects and enhances those resource values.

III. Environmental Impacts

A. Invasive plants and noxious weeds

Vehicles or OHVs used in weed-infested areas can spread weeds by transporting seeds or vegetation that becomes stuck in tire treads and other crevices.

Infestations can begin miles away as seeds drop off. Driving vehicles off established roadways and trails can also produce bare land, perfect for the establishment of new weeds.

Executive Order 13112 directs Federal agencies to prevent introduction of invasive species, detect and respond rapidly to and control such species, not authorize, fund or carry out actions likely to cause or promote introduction or spread of invasive species unless the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measure to minimize risk of harm will be taken in conjunction with the actions. (Emphasis added.)

The Federal Noxious Weed Act of 1975 requires federal land managers to develop a management program to control undesirable plants and to cooperate with state and federal agencies to manage undesirable plants.

These directives are identified in Chapter 3, along with a list of noxious weeds likely to occur in the planning area. However, the DRAMP/DEIS fails to outline what, if any, management plan would be implemented under each alternative to control noxious weeds.

Chapter 4 fails to include the required comparison of the affect on noxious weeds under each alternative. The final EIS should correct these deficiencies.

B. Air Quality

Air Quality is one of the ISDRA issues most important to PEER and its members. BLM, Forest Service and other law enforcement and other personnel working at the ISDRA on heavy use weekends are subjected to air quality conditions that are likely impacting their health. Employees have reported to PEER of being ill for weeks following such duty, and PEER staff has experienced symptoms of respiratory distress after monitoring OHV use at ISDRA on high use weekends.

On August 3, 2004, U.S. EPA reclassified the Imperial Valley from a moderate to a "serious" PM₁₀ nonattainment area. On December 11, 2007, U.S. EPA determined that the Imperial Valley failed to attain the PM₁₀ standard by the required serious area deadline of December 31, 2001.

While BLM's DEIS appears to rely on Imperial County for compliance with air quality standards; the County's 2009 SIP punts on the issue of OHVs on BLM lands: "State and BLM will address PM10 mitigation for recreational OHV areas under their control through dust control plans." However, the DEIS does not include a dust control plan, it merely refers to one which apparently must be, but has not yet been, approved by Imperial County. (DEIS p. 2-7).

It seems neither BLM nor Imperial County is willing to take responsibility for air quality at the ISDRA. BLM should have delayed release of the DRAMP/RDEIS

until its dust control plan is adopted, as the dust control plan is essential to the county's compliance with Rule 804, which is part of the SIP BLM relies on in its DEIS.

According to the DRAMP/DEIS, the incremental estimated change in emissions generated in the Planning Area under Alternatives 1 and 4 through 8 exceed the *de minimis* thresholds for several pollutants. Therefore, if one of these alternatives is selected, a Conformity Determination must be made as to whether the selected alternative conforms to the ICAPCD's SIP for ozone and PM₁₀. (DRAMP/DEIS, p. 4-6)

The intent of the General Conformity requirement is to prevent the air quality impacts of Federal actions from causing or contributing to a violation of the NAAQS or interfering with the purpose of a State implementation plan. (58 FR 63214). Since only Alternative 3 is less than the de minimus threshold, the DEIS should have included Conformity Determinations for the other alternatives, and taken into consideration whether the alternative conforms to the ICAPCD's SIP for ozone and PM₁₀. The FEIS should also disclose the consequences on the RAMP if it is determined the selected alternative fails to conform.

Finally, the DEIS fails to identify sensitive receptors and the impacts on them from air quality impacts resulting from OHV use at the ISDRA. As BLM is aware, air quality in the ISDRA, especially in the areas of concentrated use, is unhealthy. The air in the area around Glamis, for example, is so bad that visibility is drastically reduced. Despite obvious health risks, there are people who bring children, even babies, to the ISDRA, exposing them to the health risks associated with poor air quality. Certainly, these children and babies should have been identified as sensitive receptors.

Also, BLM and other agency personnel who are required to work in the ISDRA are subject to health problems from exposure to the dangerous pollutants. The DRAMP/DEIS does not identify any mitigations for reducing these impacts; the FEIS must do so.

C. Recreation

The DEIS is inconsistent in its identification of goals and the actual direction of most of the alternatives, including the preferred alternative.

The BLM's *Priorities for Recreation and Visitor Service* states:

"Our multiple use mission is to serve the diverse outdoor recreation demands of visitors while helping them to maintain the sustainable conditions needed to conserve their lands and their recreation choices. Our vision is to provide the services that will open up new opportunities for people to recreate responsibly in their great outdoors. Our goal is to provide opportunities for environmentally responsible recreation. (BLM 2003b)" (Emphasis added.)

The DEIS "General Management Actions Common to All Alternatives" includes:

“Incorporate the idea of climate change into planning so that recreational experiences may be directed toward reducing the carbon footprint.” (DEIS, p. 2-59.)

Despite these goals, the on-the-ground situation at the ISDRA discourages all recreation except OHV. While Gecko Road provides access and camping for OHV users, there is no comparable access for hikers, wild flower enthusiasts or birders. If one wishes to look at or photograph dunes vegetation or wildlife, one must hike miles across the microphyll woodlands in order to access dunes that have not been denuded by OHVs. While undisturbed dunes habitat is visible from State Road 78, there is no parking available there. Despite the lofty goals cited above, the DEIS proposes no changes to that situation under any alternative.

The DEIS describes 2-wheel drive vehicle camping opportunities as limited because of the sandy terrain to Gecko Road, a portion of the Glamis area, west side of Mammoth Wash, Dune Buggy Flats, eastern portion of the Ogilby area, and the areas adjacent to Grays Well Road in Buttercup. (DEIS, p. 3111).

These are all heavily used OHV areas; the DEIS doesn't identify any camping areas or vehicle access for passive recreation, because there aren't any.

The DEIS states the Planning Area is managed to provide non-motorized recreational opportunities, including hiking, horseback riding, wildlife and scenery viewing, picnicking, photography, nature study and environmental education, and camping, but it doesn't identify where one can enjoy such activities away from dangerous and noisy OHV activity. Section 3-15-2, “Non-motorized Vehicle Access” is, in fact, a list of vehicle prohibitions in non-OHV areas, not of access for non-motorized recreation. The final EIS should include alternatives that provide safe and quiet non-motorized recreation, accessible by passenger vehicles, with facilities for camping. Non-motorized recreationists pay the same fee as OHV users, but are denied equal access and facilities. This fails to meet the goal of providing opportunity for environmentally responsible recreation.

Nowhere does the DEIS *“Incorporate the idea of climate change into planning so that recreational experiences may be directed toward reducing the carbon footprint.”* On the contrary, the DRAMP has a heavy bias towards providing OHV recreation, and fails to provide a reasonable low-carbon alternative.

D. Visual resources

The North Algodones Dunes Wilderness Area is a Visual Resource Management Class I Area. The objective of this class is to preserve the existing character of the landscape, including visibility. (DEIS, p. 3-83). The North Algodones Dunes Wilderness is located between the Mammoth Wash open area and SR-78. Literally across the road are Glamis and Gecko areas. Glamis is a VRM Class III; Mammoth Wash and Gecko areas are VRM Class IV. (DEIS, p. 3-85).

The FEIS must explain how the RAMP will preserve the Class I visibility in the Wilderness area, while allowing degradation to Class III and Class IV in adjacent areas.

E. Wildlife and Sensitive Plants

PEER incorporates by reference the comments on the DRAMP/DEIS submitted by The Center for Biological Diversity on wildlife and sensitive plants.

F. Public Health and Safety

Law enforcement issues continue to be prevalent at the ISDRA. (DEIS, p. 3-130) The alternatives comparison indicates that closure of some areas could lead to higher densities in others, leading to more frequent law enforcement issues. Tables 3-19 and 3-20, which identify citations and arrests in the ISDRA between FY 2004 and FY 2008, do not include data for Martin Luther King Jr. or Easter holiday weekends. As these are major visitor days, omitting that data renders these tables relatively meaningless. The tables should include incidents for those weekends.

For many years, PEER has urged BLM to address “carrying capacity” at the ISDRA. The need to identify and implement carrying capacity thresholds is illustrated by the Public Health and Safety sections of the DEIS. BLM should not allow more visitors than its facilities can handle, both environmentally and with regards to law enforcement and visitor safety. BLM should determine how many visitors its own law enforcement personnel can handle. Borrowing law enforcement officers from other BLM and USFS areas leaves those areas without adequate law enforcement on major holiday weekends when those areas are also subject to high visitorship. The Cumulative effects analysis must address the impacts to these other recreation areas as a result of having their law enforcement personnel pulled to the ISDRA.

BLM should include a carrying capacity alternative to reflect its ability to protect the natural and cultural resources of the planning area, and to protect human health and safety.

III. Renewable energy

The ISDRA is not a suitable location for locating geothermal, wind or solar facilities. These facilities are industrial in nature and incompatible with either the National Natural Landmark values of the ISDRA or the recreation activities. The facilities required for the production of energy will damage wildlife habitat, increase ground disturbance and thus further impair air quality.

Utility-scale solar and wind facilities can include commitment of a large land area. Impact to special status species could include habitat degradation,

fragmentation, or loss; potential mortality of individual animals, and damage to or death of individual plants. (DEIS, p. 4-28). PEER is opposed to such facilities in the planning area.

Conclusion

The DRAMP/DEIS is flawed in a number of ways:

The DRAMP/DEIS fails to include a reasonable range of alternatives, including alternatives that address carrying capacity, equal access to non-motorized recreation sites and camping, protection of Pierson's milkvetch outside of Designated Critical Habitat and an alternative that directs recreational experiences toward a low-carbon footprint.

The DRAMP/DEIS ignores the important designation of the ISDRA as a National Natural Landmark and fails to meet the criteria for managing such areas.

The DRAMP/DEIS does not include a noxious weed management plan.

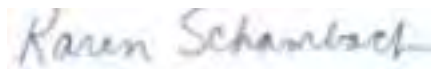
The DRAMP/DEIS fails to identify site-specific air quality issues or mitigate for them. The plan violates the Clean Air Act because it does not include Conformity Determinations; does not identify sensitive receptors and fails to mitigate for air quality impacts.

The DRAMP/DEIS fails to explain how it will maintain Class I visibility in the Wilderness area.

The DRAMP/DEIS continues to rely on law enforcement personnel drawn from other areas and does not address the cumulative effects of leaving those other areas without law enforcement on major holiday weekends.

Thank you for this opportunity to comment. If you have any questions regarding these comments, please call me at 530-333-2545.

Respectfully submitted,

A handwritten signature in blue ink that reads "Karen Schambach".

Karen Schambach
California Coordinator
Public Employees for Environmental Responsibility

From: [Camie Pretzinger](#)
To: caisdrmp@ca.blm.gov
Subject: Closure of camping areas
Date: 08/09/2010 11:47 PM

August 9, 2010

If the BLM is going to restricted camping in washes 20 to 44, maybe a special camping pass, with special education on using these special areas. Would be a good resolution.

Richard T. Pretzinger Jr.
29915 Hook Creek Road
P.O. Box 460
Lake Arrowhead, CA 92352
909-337-7166

From: [Laurie BALLARD](#)
To: caisdrmp@ca.blm.gov
Subject: ISDRA RAMP comments
Date: 08/09/2010 11:27 PM

To whom it may concern:

I do not support anymore closures of the ISDRA. Please re-open the closures that occurred in 2000 and 2001.

As a rider and person who supports the beauty of the dunes, I believe we can achieve balance between the use of the dunes

for riding/recreation AND preservation. I have participated in many adopt-a-wash programs and dune clean-ups. Those who

ride, also care about making the area safe for all. As one of 33,000 members of GlamisDunes.com, I know we promote safety

in the dunes and are a key contributing force in preserving its beauty. Please allow us to enjoy and care for the dunes by not

closing it off.

Thank you,
Laurie Ballard

From: BILLREEFF@aol.com
To: caisdrmp@ca.blm.gov
Subject: isdra ramp proposals
Date: 08/09/2010 10:45 PM

To Whom It May Concern,

My name is William ReeFF and I attended 2 ramp meetings and 1 meeting sponsored by the ASA to get an idea of why areas had to be closed or monitored. I have read both volumes of the march 2010 DRAMP books. I would consider myself someone new to enjoying the ISDRA as I have been coming to the DUNEBUGGY FLATS AND OGILBY RD. sections for the past 7 years. I camp with a group of families that have been coming to ISDRA for 30 to 40 years. I can understand that some species of plants and animals do need protection as well as lands that need to be protected on behalf of the OHV community. Time and time again the OHV community loses available land due to some endangered species. With the decision of the USFWS to mandate critical habitats and demand new closures I **reluctantly** agree with the BLM that proposal #8 would offer the least amount of closures.

I feel that that if CH for PMV have to be established then it should be only where the PMV is located. If CHs block thoroughfares then corridors must be established so that OHV traffic has a eco friendly way of traversing from open to open areas and this would be beneficial for the PMV. Most of the OHV community will abide by the laws however there are some that will enter CH areas to get from one place to the next.

Secondly, if camping areas need to be closed ,wash 25 thru wash 69 (for microphyll woodlands) and Dune Buggy Flats (for PMV rainfall threshold) then other camping areas must be developed (at least gravel base roads for access) and they have to be placed in such a way as to not approach upon other CHs.

Lastly I feel that if scientist can come up with a number that says a species either plant or animal is endangered because of minimal population numbers then wouldn't it be feasible that it be mandated that maximum population numbers be established so that areas can be reopened in the future. I think that all scientific studies (governmental and private) should be examined in determining closures. The ASA sponsored DR Art Phillips and none of his studies were considered for review.

In a perfect world everyone would enjoy the same access equally to government lands. With continued area closures eventually the OHV enthusiast will be the endangered species and that lands will have to be opened back up for us. And just for thought what would it take to make a RAMP that would be of sort of permanent status or up for review in 20 or 30 years. I would really hate to lose any more land available for recreation, after all isn't the big picture trying to keep land accessible to everyone?

I would like to thank all of members of the EL Centro BLM office ,especially Neil Hamada, for the effort put forth for this RAMP. I would also like to express my thanks to all of the BLM personal that make the ISDRA a better place to recreate because of their efforts.

Thank you for your time,
WILLIAM REEFF
861 Newton st
San Fernando, CA 91340

H

From: [mike m](#)
To: caisdrmp@ca.blm.gov
Subject: Draft RAMP/EIS
Date: 08/09/2010 08:46 PM

Public comment:

I highly support alternative 1 for the imperial sand dunes recreation area.

Thank you,
Mike Moinfar
20092 spruce ave
newport beach, ca 92660
619-572-6561

From: [Lee](#)
To: caisdrmp@ca.blm.gov
Subject: public comment on the BLM's (DRAMP) and (DEIS)
Date: 08/09/2010 07:24 PM

im just a very concerned american citizen. and duner.

Erin Dreyfuss
Ramp Team Leader
Bureau of Land Management
1661 s Fourth Street
EL Centro, CA. 92243
caisdrmp@ca.blm.gov

Subject:

My comments to the March 2010 Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Area (ISDRA)

Dear Erin Ramp Team Leader

After careful review of the plan it has come to my attention that the entire plan (DRAMP) is flawed and the (DEIS) is as well. There has been no evidence provided by any one that supports that sound science has been used if the findings to support the plan (DRAMP) or the (DEIS). That any of the evidence was subjected to a clean fair peer review or that all parties involved were even qualified to do the study's or review said study's, with that said I believe that the entire process, plan (DRAMP) and the (DEIS) are flawed and that there is no reason to continue with the plan to restrict the AMERICAN PUBLIC free and unrestricted access to the entire ISDRA. I'm going to encourage the filing of a law suit against the BLM and there continuing of the plan (DRAMP) or the (DEIS) at this time the suit will be filed under the Information Quality Act (IQA) this will show that there is no reason or supporting qualified evidence to proceed.

Thanks,
A concerned American
Lee Banning
Po box 459 Laveen, AZ. 85339
lee@mknhay.com

From: [Nicole Nicholas Gilles](#)
To: caisdrmp@ca.blm.gov
Subject: DRAMP Comments
Date: 08/09/2010 04:49 PM

August 9, 2010

RAMP Team Leader
Bureau of Land Management
1661 S. Fourth Street
El Centro, CA 92243

Dear RAMP Team Leader:

Please accept the following as my comments in response to the March 2010 Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Recreation Area (ISDRA).

I feel that there is lack of technical support for Alternative 8 camping closure in Dunebuggy Flats. Alternative 8 also calls for the closure of camping areas within Dunebuggy Flats when rainfall in the dunes reaches a certain threshold (1.82 inches between October 1 and December 31). According to the RAMP/EIS, this "adaptive" strategy will benefit PMV reproduction which is strongly dependent on precipitation. The problem, however, is that there is no evidence that camping in Dunebuggy Flats during "high rainfall years" has affected, or will affect, PMV reproductive success in Dunebuggy Flats, the adjacent Ogilby Management Area, or in any other critical habitat unit of the ISDRA.

There is also no need for PM10 air meters in the ISDRA. On page 2-7, the document indicates that BLM will install air meters to monitor PM10 levels in the ISDRA. We question the need for this effort on two grounds. First, there are no sensitive receptors at or near the ISDRA, so the PM10 emissions from the planning area are unlikely to affect the persons that the PM10 thresholds are intended to protect. Second, data generated by Environ on behalf of the Imperial County Air Quality Control District (the "District") demonstrate that the District is well within the PM10 attainment threshold (150 micrograms per cubic meter per day) except during extreme wind events and cross-border transport events, both of which occur one to three times per year. These same data indicate that the wind events have historically occurred between mid-April and mid-September, which is outside the typical OHV season at the ISDRA. In other words, the Environ studies establish that OHV use at the ISDRA has not caused or significantly contributed to the recorded exceedances of the PM10 thresholds. Therefore, there would appear to be little need for, or benefit from, installing PM10 monitors at the ISDRA. The District's PM10 documents, including the Environ studies cited here, should be consulted and included in the administrative record for the RAMP/EIS.

The RAMP/EIS must provide more information on economic impacts on Imperial and

Yuma County. The RAMP/EIS does not provide adequate information regarding the current economic conditions in Imperial County (CA) and Yuma County (AZ). Nor does it assess or disclose the effects, if any, of the proposed alternatives on these economic conditions, including unemployment and poverty rates. Specifically, it would be helpful to know the impact of each alternative on the economies of the cities and towns

nearest the ISDRA, such as El Centro and Brawley. The document should also evaluate whether these economic impacts may lead to physical/visual blight in the affected areas.

I also believe that air emissions modeling sources should be provided as technical appendices. In Table 4-3 (Air Quality), the RAMP/EIS provides "Estimated Annual Air Quality Emissions Due to OHV Activity (Tons/Year)." These data were "calculated using the NONROAD model for ATVs, motorcycles, and sand rails (EPA 2006), and the URBEMIS 2007 model for 4-wheel drive trucks (Rimpo and Associates 2008)." In addition, fugitive dust emissions for ATVs and motorcycles were estimated using rates from the South Coast Air Quality Management District (1993). Unfortunately, however, the RAMP/EIS does not include the Rimpo and Associates (2008) report or any of the modeling source documents as appendices, so it is impossible for the public to review them for accuracy. This should be corrected in the Final RAMP/EIS.

Please take my comments into account when working on the final Recreation Area Management Plan. Should you have any questions, please feel free to contact me.

Sincerely,

Nicole Nicholas Gilles
1029 Calle del Cielo
Brawley, CA 92227

From: [john baker](#)
To: caisdrmp@ca.blm.gov
Subject: glamis/isdra
Date: 08/09/2010 04:25 PM

to whom it may concern,

my question is simple. when will people matter? when will i matter? i have been going to Glamis, Dumont and Pismo my entire life. i mainly visit glamis/isdra now. i have never EVER seen a tortoise in the dunes, i have NEVER seen a hiker. I do see families enjoying and recreating. i know if it were left to some ALL riding areas would just close. however, these people will never be satisfied because their unhappiness comes from others not happy; just like them.

so back to my original question when do people matter? leave our public lands free and open. why even call it public land? when will anyone fight for my right to live and raise my family and enjoy the area in which i have over 100k invested?

when will people that make decisions on this area actually go there and see for themselves? please please keep this land open!

From: [Matt and Holly Valenzuela](#)
To: caisdrmp@ca.blm.gov
Subject: ISDRA DRAMP Comments
Date: 08/09/2010 04:18 PM

To whom it may concern:

My family and I have frequented the ISDRA for recreation for nearly 2 decades. While I understand that sensitive species must be protected, this area is important to me and it is important to me and my family that access be preserved.

Thank you to all who too the time to compile everything required for this process. I understand that it is often a contentious and difficult task. Thank you for your hard work and efforts.

Below are my comments for the current ISDRA DRAMP.

General:

In general, I am concerned that this DRAMP does not include all available documentation on the Pierson's Milkvetch. All scientific documentation regarding this species should be included as it is the primary reason cited for limitations on recreation in carious parts of the ISDRA.

This DRAMP also closes Dune Buggy Flats to camping when certain rainfall thresholds are met, for protection of the PMV. There are, however, no technical data to support this closure. This closure should be removed from consideration. Additionally, the closure area in the southern washes should also be removed from consideration. There is one study cited regarding the microphyll woodlands, however no evidence of damage by recreation is presented and the study itself indicates that there are numerous flaws in its data.

Additionally, there is no requirement that critical habitat be closed to access, nor evidence to support that OHV use damages these areas. The critical habitat areas should either remain open or, at a minimum several corridors for access to the commonly used dune areas be made available through the CH.

Specific comments:

Appendix D: Precipitation monitoring

There is no explanation for the rainfall threshold. Without some data explaining the reasoning behind this, the threshold and associated camping closures are arbitrary and should be removed from consideration.

Appendix O: Photo on page 8, figure 3.

This photograph has absolutely nothing to do with the topic being discussed. While illegal OHV use should be addressed, placing the photo here serves no purpose and it should be removed.

Page 2-65, section 2.3.14.3.2 (Limited RMZ)

Navigable washes must be added to the places where OHV can be used under NECO.

Page 1-2, section 1.1.1

What constitutes recovery of the PMV? There must be some threshold at which the PMV is

considered to be recovered so that it may be delisted. Additionally, there is no indication where technical data in this area came from. It must be included. Additionally, since there is no requirement to close critical habitat, some rational, supported by science, must be presented, or the closures must be removed.

Matt Valenzuela
506 W. Ridgecrest Rd
Desert Hills, AZ 85086
623-640-2057

From: [John H. Hartman](#)
To: caisdrmp@ca.blm.gov
Subject: Imperial Sand Dunes Draft RAMP comments
Date: 08/09/2010 10:53 AM
Attachments: [RAMPcomments.pdf](#)

Attached.

John

From: [Curt Leibel](#)
To: caisdrmp@ca.blm.gov
Subject:
Date: 08/08/2010 11:13 PM

Is all this about closures and restrictions at Glamis dunes political or does the government just hate OHV families. I have taken my family to Glamis for over 25 years, now my sons are taking my grandchildren. Why does the government always want to take? I'm really starting to take this personal. Please reconsider your stand on all these closures and restrictions. thank-you for your time.

From: JVBrunasso@aol.com
To: caisdrmp@ca.blm.gov
Subject: Draft Imperial Sand Dune Recreation Management Plan Comments
Date: 08/08/2010 09:46 PM

Erin Dreyfuss
Bureau of Land Management
1661 S. 4th Street
El Centro, CA 92243

Ms. Dreyfuss,

My general comments on the Draft Imperial Sand Dune Recreation Management Plan are below.

It would seem that the new plan involves provisions for further closures and recreational restrictions in the ISDRA. This is unfortunate and certainly an undesirable situation for people who frequently use the area.

Many years ago, the dune area north of highway 78 was closed to off-roading. This fact appears to have been lost on the governmental agencies managing the areas as well as the environmental groups seeking to close additional acreage to off-road recreation. The significant acreage of the area north of highway 78 is more than sufficient to preserve any species that may be affected by off-roading or other recreational activities. As such, the "temporary" closures in the area south of highway 78 and/or any additional restrictions are completely unnecessary. As an aside, the "temporary" closures have been in place for approximately ten years.

All scientific facts have not been included in the new plan. Numerous studies have been conducted to develop essential data and much of that data is absent as a reference when proposing how to manage the area. It would seem that the management plan is more geared to appeasing both sides of this conflict (environmental groups vs. recreational groups) and appealing to political interests instead of real scientific facts. This is not unexpected, but unfortunate nonetheless.

For the entire duration of this debate, it is my understanding that not one comprehensive, reliable and competent PMV study has indicated that the plant is negatively affected by off-roading. There is, however, one element that many of the studies do indicate:

The success of PMV is entirely dependent on rainfall.

My family and myself have been attending the ISDRA for approximately 25 years. We have experienced years of significant rainfall and years of very little rainfall. There is an obvious and direct correlation with the amount of foliage (including PMV) that appears each year when compared to rainfall. The plan seems to acknowledge the rainfall issue in part, but there is no science that supports the proposal for additional protection for PMV during years of more rain. Realistically, the more rain is present, the better the plant will do regardless of how much protection for it is or is not in place.

I would encourage BLM to revisit the management plan to include the data derived from the multiple studies that have been conducted. The large expanse of public land that has already been closed north of highway 78 and made essentially inaccessible to anybody should also be considered. I agree that it is vitally important to preserve our public lands and resources. However, this must be done in an effective manner consistent with scientific fact that will yield results that are actually beneficial, not perceived to be beneficial.

Thank you for the opportunity to comment.

Joe Brunasso
9437 Verbena Road

Oak Hills, CA 92344
(909)957-6835

From: [Rob](#)
To: caisdrmp@ca.blm.gov
Subject: DRAMP Comments
Date: 08/08/2010 04:46 PM
Attachments: [RAMP.doc](#)

Please see my comments in the attached document.

Thank You

Robert S. Cohen and family

From: horn.wa@verizon.net
To: caisdrmp@ca.blm.gov
Subject: comment letter
Date: 08/08/2010 01:17 PM
Attachments: [BH comments.pdf](#)

Hello Erin,

Please find my comment letter attached.

Thanks,

Bill Horn.

From: horn.sl@verizon.net
To: caisdrmp@ca.blm.gov
Subject: comments
Date: 08/08/2010 01:29 PM
Attachments: [SH comments.pdf](#)

Dear Erin,

Please find attached my comments to the draft ramp for Glamis.

Thank you,

Sarah Horn.

From: horn.ma@verizon.net
To: caisdrmp@ca.blm.gov
Subject: comments
Date: 08/08/2010 01:26 PM
Attachments: [MH comments.pdf](#)

Hi Erin,

My comments to the draft ramp are attached.

Regards,

Melissa Horn.

From: horn.la@verizon.net
To: caisdrmp@ca.blm.gov
Subject: comment letter
Date: 08/08/2010 01:21 PM
Attachments: [LH comments.pdf](#)

Dear Erin,

I am attaching my comments to the draft ramp for Glamis. Please see attached letter.

Thanks,

Laurie Horn.

From: horn.jw@verizon.net
To: caisdrmp@ca.blm.gov
Subject: my comments
Date: 08/08/2010 01:23 PM
Attachments: [JH comments.pdf](#)

Hi Erin,

Attached are my comments to the draft ramp for glamis.

Thanks,

Joshua Horn.

Emily Ryan
639 Pepperwood Dr.
Brea, CA 92821
714-595-2747

August 8, 2010

RAMP Team Leader
Bureau of Land Management
1661 S Fourth Street
El Centro, CA 92243

Subject:

Comments on the March 2010 Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Recreation Area (ISDRA)

Dear RAMP Team Leader,

After a careful review of the alternatives discussed in the DEIS, my preference is Alternative 1. However, I do believe that some of the other alternatives, notably Alternatives 7 and 8 each have attractive features which could be combined into a potentially effective hybrid. Realigning the irregular boundaries of the Alternative 8 proposed *Astragalus magdalenae* var. *peirsonii* (PMV) critical habitat (CH) closures, increased signage and law enforcement during exceptional rainfall years along with clearly marked pass-through routes would provide a more manageable alternative.

I respectfully request that Bureau of Land Management (BLM) consider and assess such an alternative in the Final EIS. My support of a hybrid alternative will depend on the features that alternative would contain and the impacts it would create.

I respectfully requests that Bureau of Land Management (BLM) consider and assess such an alternative in the Final EIS. The ASA's support of a hybrid alternative will depend on the features that alternative would contain and the impacts it would create. The proposed consideration of "hybrid" alternative is provided in response to the last sentence on the first page of DRAMP "Abstract" which states ***"The proposed decisions under this alternative (# 8) could be identical to those under one of the other alternatives presented or could be a combination of the features from several of the alternatives."***

With respect to the specifics to the Alternative 8, the following comments are submitted:

OHV Closures and PMV CH

The preferred alternative, Alt. 8, calls for closure of all areas designated as Critical Habitat (CH) for PMV by FWS. This includes an area of the north dunes north of the

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wilderness area, the wilderness area, an area from the central dunes southward nearly to I-8, and a small area near the border south of I-8. The large proposed central dunes closure is irregular in shape, and includes several narrow “peninsulas” extending eastward from the main body of the closure. There is a break at the southern end with a disconnected area to the south

Marking such an area on the ground would be a difficult task, and the narrow peninsulas would be extremely confusing. The lack of pass-throughs for miles and miles would make entry into the open area to the east difficult. This would be confusing to both recreationist and law enforcement.

As an alternative to the CH closures proposed in Alt. 8, I propose a smoothed boundary around the main body of the CH as shown in Alt 7, eliminating the peninsulas, the area south of Patton’s Valley and north of I-8 from closures. Unlike the temporary closures, the boundaries should follow the morphology of the dunes, in the interest of safety and clarity. This would not need to be as wide as the closures in Alt. 5 and 7, because the eastern third to half of those areas is beyond the CH boundary and without significant PMV populations.

Clearly marked pass-through routes should be established every half-mile to mile along the central closure to allow OHVs to access open areas to the east from the Sand Highway and remove the temptation to cross the closed area. It will not be difficult to locate areas that can be safely traversed without PMV; lateral sand ridges are frequent in the area and are currently used without affecting any PMV plants. This will also eliminate the necessity of rainfall-induced closure of DBF, as the temptation to closed CH area will be reduced by having regularly distributed designated crossings. The boundaries of the closure and the pass-throughs should be clearly marked and maintained.

Peirson’s Milk Vetch (PMV) Critical Habitat (CH) should remain open to OHV activities.

There is no legal requirement to close CH.

Closure has not been scientifically proven necessary for the plant’s survival. The best available science indicates that PMV colonies do well in the presence of OHV activity. Moreover, contrary to many opinions, OHVs are not the greatest threat to the PMV.

In a study performed by the BLM entitled, “2005 Monitoring of Peirson’s Milkvetch in the Algodones Dunes, Imperial County, California”, scientific evidence is quite the opposite. Page 24 states, “*Dunes-wide, an estimated 8,113 plants, representing 0.44% of the total estimated plants, showed signs of impact from OHVs.*” Page 25 states, “*Dunes-wide, an estimated 81,174 plants, representing 4.43% of the total estimated plants,*

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showed signs of damage from sources other than OHVs.” Basic math shows that the impact from OHVs are only 1/10 that of natural impacts which are in themselves insignificant.

The same report indicates that there were 1.8 million plants in 2005. Page 25 states, “*The 2004-2005 growing season was very favorable for the germination and establishment of Astragalus magdalenae var. peirsonii and was likely the best growing season for the species since the 1997-1998 growing season. Rains beginning in October 2004 resulted in a significant germination event and an estimated 1,831,076 plants occupied the Dunes in spring 2005. Of this total, 1,369,482 plants (75%) were flowering or past-flowering at the time of monitoring. Only 21,777 (1.6%) of these plants were more than a year old. Thus, 98.4% of the 2005 plants represented a 2004-2005 growing season cohort. This supports previous contentions that this species functions more like an annual than a perennial and that the majority of seeds in the seed bank are produced from current year plants in good rainfall years.*” The report shows that PMV numbers are influenced by rainfall more than anything.

The results of the above study confirm those of an earlier study performed by Thomas Olsen & Associates in 2001 where less than 1% of PMV were affected by OHVs. It is important to note that the TOA study was performed exclusively in areas open to OHVs. Thus the <1% is a true figure for open areas and cannot be construed as being higher because no closed areas were included.

Additionally, page 30 of the report entitled, “Monitoring of Special Status Plants in the Algodones Dunes, Imperial County, California 1977, 1998, 1999, and 2000” by John Willoughby, State Botanist, Bureau of Land Management (BLM), California State Office states, “*The response of Astragalus magdalenae var. peirsonii, a short-lived perennial, is closely tied to precipitation. It was most abundant in 1998, the highest rainfall year, and least abundant in 2000, the lowest rainfall year. Responses of this species were similar in both the closed and open areas across all four years of monitoring....Healthy populations of all three species remain in the open area, though the above-ground expression of populations of Peirson’s milk-vetch fluctuates dramatically with precipitation.*

***There is no evidence of any OHV effect on either Peirson’s milk-vetch or Algodones Dunes sunflower.** An increase in sand food in the open area between 2001 and 2002 may result from a release in pressure from OHV use in the interim closures, but this is inconclusive and may be at least partially an artifact of sampling. ... This indicates that there has been little change in Peirson’s milk-vetch abundance and distribution in the open area relative to the closed area since 1977. **Changes in year-to-year abundance are related primarily to weather in both the open and closed areas.**”*

In some instances (probably due to rainfall), the PMV will actually do better in open areas than in closed areas as noted on page 22 of Monitoring of Special Status Plants in the Algodones Dunes, Imperial County, California 1977, 1998, 1999, and 2000 “*Rainfall in 1998 was much more favorable to the species, **resulting in higher abundance class values in the open area than in the closed area.** This disparity also*

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existed in 1999, but was smaller. This may mean that the southern dune have more favorable habitat for ASMAP, but the reverse pattern observed in 1977 argues against this hypothesis. It is possible that more precipitation fell in the southern part of the dunes in 1998 and 1999 than in the northern part. There is some evidence for such a trend from RAWs data collected between November 16, 2000 and March 16, 2001: 1.40 inches of precipitation were recorded at Cahuilla in the northwest part of the dunes and 2.67 inches were recorded at Buttercup in the southern part of the dunes. The higher abundance class values in the closed area in 1977 may have resulted from higher rainfall in the northern dunes during that year. In any event, differences between open and closed areas were not great in any year and, as previously stated, ASMAP responded similarly in both areas over the four years."

All studies indicate that PMV numbers are predominately the result of rainfall and are not significantly influenced by whether the area is closed to OHV operation or not. Based on the foregoing, there is no valid reason, scientific or otherwise, to close the PMV CH to OHV operation. No purpose is served by PMV CH closure.

If FWS must have CH closure, I suggest that it be only in years where an explosive germination even is underway and there is every expectation that the crop will flower and produce seed as in 2005. This does not directly tie a closure to rainfall where the exact amount required for explosive germination is unknown.

Other years, the closure can be advisory in nature where vehicles are allowed to enter and education plays a major role. Visitors can be instructed to see and avoid all vegetation to the best of their ability. Adverse modification should not be a concern as dune vehicles are designed to float on top of the sand and the tracks disappear in minutes in a strong wind. A single strong windstorm is known to deflate the dunes several feet and move thousands of tons of sand. This is much more than what all ISDRA OHV visitors can do in a whole season.

OHV use in the low swales, where the PMV grows, is not where OHV riders prefer to operate their vehicles. Riders select the tops of ridges where it is smooth and there is no vegetation to damage thin tires. As stated in the reports above, this is the reason that PMV, and other dune vegetation, can co-exist with OHVs.

While many OHV enabled ISDRA visitors wishing a quiet experience full of solitude would take advantage of the deep dunes, it is doubtful large numbers as seen at the major hills on holiday weekends will enter much of the CH. Today's equipment uses more fuel, is heavier, and thus presents many challenges when venturing too far from camp. Towing long distances is problematic as is running out of fuel. There are no popular gathering spots deep in the dunes and the sand is of finer grain making it too soft for a good ride. In addition, there are no large bowls or long stretches where the roller coaster effect can be achieved.

Continued monitoring would be used to validate this strategy.

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Dune Buggy Flats closure is without scientific basis.

The rainfall-triggered camping closure of Dune Buggy Flats **lacks sufficient rational** to support this major action. This proposal presumes that BLM is incapable of enforcing the PMV CH closures. This proposal ignores historical closure compliance and assumes that BLM cannot provide the required enforcement resources.

Microphyll Woodland Closure is without scientific basis.

The proposed camping closure in the eastern part of the dunes is unreasonable. Under Alternative 8, this closure would be implemented to protect microphyll woodland and would extend from Wash 25 to Wash 69. There is no scientific evidence that any of the microphyll woodland in this eastern portion of the ISDRA has been damaged from camping or any other recreational activity.

After the 2001 closure east of the railroad tracks, many of those, including myself and group, relocated to the washes beyond Wash 25 in order to seek a camping experience with similar solitude as was available with the eastern camping area. Camping is typically located within the flat areas between the washes and away from the microphyll woodland areas. Transitioning from the camping areas to the dunes typically follow established routes thus avoiding the vegetation.

Appendix “O” regarding bird populations provides no conclusive evidence in support of a camping closure. Even if it did, balanced use is not achieved by closing 100% of microphyll woodlands.

The PRBO study quoted in appendix “O” states that best quality woodlands exist in the wilderness area across Hwy 78. The study indicates that increased bird numbers in closed areas may be due to it being the best quality habitat. The study admits its own flaws and recommends further studies and data gathering.

Microphyll woodlands do not compose all of proposed closure. The microphyll woodlands are farther from wash road as the wash numbers increase to the Southeast – thousands of acres of non-microphyll woodlands are able to support camping. A large area exists between microphyll woodlands and wash road. From Wash 25 to Wash 69, there are approximately 5600 acres that are not microphyll woodlands (using rough tools provided by Google Earth). The proposed closure includes these acres that are previously disturbed.

BLM has apparently not conducted vegetation and habitat analysis studies within the microphyll woodland (Appendix O, p. 19). Since vegetation is the underlying component not only for the avifauna component reported, but also for all other elements of the microphyll woodland community, a comprehensive baseline analysis of the plant community would seem to be an imperative component of any decision-making process that involves Alternatives affecting management of the microphyll woodland. The report

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included as Appendix O also cites deficiencies in the avifauna analysis including sampling shortcomings and errors that should be resolved before an informed management decision is possible. The decision to implement camping restrictions but not travel restrictions in Alternative 8 (but not in other Alternatives) appears to have been arbitrary and should be further explained. Decisions involving management alternatives for the microphyll woodland appear to have been made prematurely and without adequate scientific study and analysis.

Dr. Art Phillips III, Ph.D Studies.

BLM has chosen to ignore the work of Dr. Art Phillips III. His work is comprised of a large body of published information and data regarding the distribution and ecology of the PMV. This is peer-reviewed science. More importantly, his studies were conducted in areas open to OHV operations that document PMV and OHVs can co-exist. This omission renders many of the DRAMP recommendations invalid.

Conclusions

The comments above are from those shared by members of our group, with additional commentary used from Vincent Brunasso, and Dr. Art Phillips III, Ph.D.

Sincerely,

Emily Ryan.

From: [DON DENT](#)
To: caisdrmp@ca.blm.gov
Subject: re ISDRA DRAMP
Date: 08/07/2010 09:23 PM

My Name is:

Don Kent

2220 E. Olmstead Way,
Anaheim Ca 92806
714-813-2591

I would like to submit my opinion as to what Alternate to use for the DRAMP in the Imperial Sand Dune Recreation Area or ISDRA. Having used this area to vacation with my family since 1-1-1976. I would prefer Alternate Option #1 but it being very doubtful that it is what is being considered then I request a VOTE for the Preferred Alternative #8.

After reviewing data I don't see any consistency of "Real Science" being used in the decision of the access to the ISDRA. Please consider allowing 2 or 3 - 30 foot wide designated access paths for OHV to travel between closures provide Legal and safe access between Open and Closed Areas.

Regards, Don Kent registered voter in Orange County California

From: AzSandman2@aol.com
To: caisdrmp@ca.blm.gov
Subject: Comments for the ISDRA DRAMP
Date: 08/07/2010 04:00 PM

To Whom It May Concern:

As a stakeholder of the ISDRA I would like you to consider my input and comments on your preferred Alternative, #8. It doesn't take all things in consideration or is supported by data from the monitoring that was done. Closing all the Critical Habitat to help the PMV recover isn't supported by the data collected in the BLM studies or those of Dr. Phillips. For the last ten years there has been areas temporarily closed because of a lawsuit settlement. The studies show that the PMV in the Critical Habitat areas outside of these Temporary Closed Areas are doing as well as the PMV inside the Temporary Closed Areas. These are areas open to motorized travel now and have been open to motorized travel before any lawsuit settlement. There should be continued monitoring in these areas but they should be left open unless there is evidence that the PMV are being put in jeopardy. The areas of Critical Habitat for the PMV in the now temporary closed areas should be monitored also but access should be by restricted for motorized travel while continued monitoring is done. When there is sufficient evidence that the PMV is not in jeopardy, then these areas should be opened to motorized travel. To do this the BLM and the USFWS needs a recovery plan so everyone will know if the PMV is recovering or is in jeopardy. The Critical Habitat areas in the now temporary closed areas should have straight borders as in Alternative #7 but the East border should not extend out to the few clusters of PMV like is shown in Alternative #7. The East boundary as in Alternative #7 should be adjusted so the Critical Habitat that is going to be temporary closed is no wider than one mile and a quarter at any point.

There is no data that indicates there is a need to provide extraordinary protection in a extraordinary rainfall year. A trigger could be useful to trigger extraordinary monitoring in an extraordinary rainfall year along with increased education in the Dune Buggy Flats camping area. The rationale of how the BLM reached the trigger number of 1.82 inches of rain is flawed in many ways anyway. To use a average of rainfall in seven Western Regional Climate Centers to reach the 1.82 inches of rain for the trigger but only use two of the weather stations, the one off of Gecko Rd. and the one at Buttercup as stated at the Phx. Public Comment meeting to implement the trigger doesn't appear to be a consistent way to approach this. As stated at the Phx. meeting, using rain stations anywhere but in the area that is going to trigger a action isn't a reliable way to do this.

In Alternative #8 it shows that the Microphyll Woodlands is closed to camping from wash 25 to wash 69. The data shown in the EIS doesn't support doing this but using the same criteria as earlier with the Critical Habitat, the BLM should consider only temporarily closing camping in the Microphyll Woodlands in the areas that are now temporarily closed because of the lawsuit settlements ten years ago. Continue to monitor and collect data to support a position of closing camping or opening the areas up to camping. The areas in the Microphyll Woodlands that have always been open to motorized travel should continue to be monitored for adverse modification but not closed to camping unless evidence and data requires it. The data at this time does not support closing the camping outside of the Temporarily Closed areas at the Microphyll Woodlands Area.

The BLM should not do closures without data to support that closure. The Wilderness Area is approx. 26,000 acres that was set aside to sustain all dune species. It is an area that is

larger than most sand recreational areas in it self and is enough of an area to sustain the PMV from going extinct.

Thank you,

Jerry Seaver
2950 W. State
Phoenix, Az. 85051
AzSandman2@aol.com
602-864-1788
Cell 602-432-1918

From: al.almeida
To: caisdrmp@ca.blm.gov
Subject: Dramp Comment
Date: 08/06/2010 10:11 PM

Team Leader,

I feel that it has not been completely proven that the PMV is becoming extinct or endangered in the open area of the dunes. There seems to be more PMV plants in the open area with constant vehicle use than the "wilderness" area that has been closed off for years.

I want to point out a story I read in the Daily Review on July 13, 2003 The Battle Over Grazing. In the article they mentioned a little triangle of land in Martinez California where they had found a plant, the Contra Costa Goldfield, a diminutive flower found only on one other spot on the globe. The plant was in this valley where cattle had grazed for years. They found and counted half a million of these plants in this valley. The environmental experts decided that to protect the unique plants they would need to remove all the cattle from the valley. They also changed plans for a proposed highway improvement. Four years after they removed the cattle they only counted 30 flowers. Apparently the plants were thriving from the cattle grazing there. The environmental experts felt that the human element would disturb the plant but in fact it was the opposite effect. I think this may be the same effect with the PMV. More science needs to be done but I don't see the plant disappearing in the dunes where we run the buggies.

Please consider my thoughts and facts when you decide the fate of my beautiful winter play land. I always make sure to pick up after we leave and that it is cleaner then when we arrived.

Sincerely

Albert Almeida

2241 W Ave 135th

San Leandro, CA

From: vdaddy@sbcglobal.net
To: caisdrmp@ca.blm.gov
Subject: Dramp Comments
Date: 08/06/2010 10:05 PM

Team Leader,

I feel that it has not been completely proven to me that the PMV is becoming extinct in the open area of the dunes. There seems to be more PMV plants in the open area than where there has been constant vehicle use than the "wilderness" area that has been closed off for years.

I want to point out a story I read in the Daily Review on July 13, 2003 The Battle Over Grazing. In the article they mentioned a little triangle of land in Martinez California where they had found a plant, the Contra Costa Goldfield, a diminutive flower found only on one other spot on the globe. The plant was in this valley where cattle had grazed for years. They found and counted half a million of these plants in this valley. The environmental experts decided that to protect the unique plants they would need to remove all the cattle from the valley. They also changed plans for a proposed highway improvement. Four years after they removed the cattle they only counted 30 flowers. apparently the plants were thriving from the cattle grazing there. The environmental experts felt that the human element would disturb the plant but in fact it was the opposite effect. I think this may be the same effect with the PMV. More science needs to be done but I don't see the plant disappearing in the dunes where we run the buggies.

Please consider my thoughts and facts when you decide the fate of my beautiful winter play land. I always make sure to pick up after we leave and that it is cleaner then when we arrived.

Sincerely

Vic Almeida

BAD Buggies

2539 Williams St

San Leandro, CA

From: [Victor Almeida](#)
To: caisdrmp@ca.blm.gov
Subject: Dramp Comments
Date: 08/06/2010 09:57 PM

I feel that there has not been enough evidence to completely prove that the PMV is becoming extinct in the area due to Off-Roadng. There seems to be more PMV plants in the area where there is constant vehicle use. There seems to be more PMV in the open areas than in the "wilderness" area that has been closed off to duning for years.

I want to point out a story I read in the Daily Review on July 13, 2003 called The Battle Over Grazing. In the article they mentioned a little triangle of land in Martinez California where they had found a plant, the Contra Costa Goldfield, a diminutive flower found only on one other spot on the globe. The plant was in this valley where cattle had grazed for years. They found and counted half a million of these plants in this valley. The environmental experts decided that to protect the unique plants they would need to remove all the cattle from the valley. They also changed plans for a proposed highway improvement. Four years after they removed the cattle they only counted 30 flowers. apparently the plants were thriving from the cattle grazing there. The environmental experts felt that the human element would disturb the plant but in fact it was the opposite effect. I think this may be the same effect with the PMV. More science needs to be done but I

don't see the plant disappearing in the dunes where we run the buggies.

Please consider my thoughts and facts when you decide the fate of my beautiful winter play land. I always make sure to pick up after we leave and that it is cleaner then when we arrived.

Sincerely

Al Almeida
BAD Buggies
2539 Williams St
San Leandro, CA

From: [steve.schlueter](mailto:steve.schlueter@caisdrmp@ca.blm.gov)
To: caisdrmp@ca.blm.gov
Subject: RAMP letter
Date: 08/06/2010 06:44 PM

Erin,

Below is a copy of a letter sent by Bob Mason, President of the ASA (American Sand Association) regarding the RAMP study and decision process you are involved in for the Imperial Dunes.

As a member of the ASA, I fully support the information contained in his letter, and I trust you will take those points into consideration during the decision process...

Thank you for your time and consideration,

Steve Schlueter
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Wickenburg, AZ. 85358

P.O. Box 1872 Canyon Country CA. 91386-1872 888-540-7263 www.americansandassociation.org

President Bob Mason **Board of Directors** Bob Gagliano - Secretary

Dick Holliday – Treasurer

Vicki Cossey

Chuck Hattaway Gary Jordan

Jim Bramham Mike Sommer

Scott Swenka

Advisory Committee

Jerry Seaver

Vincent Brunasso

Grant George

Executive Director

Nicole Nicholas Gilles

August 4, 2010

RAMP Team Leader
Bureau of Land Management
1661 S Fourth Street
El Centro, CA 92243

Subject:

Comments on the March 2010 Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Recreation Area (ISDRA)

Dear RAMP Team Leader

Of the alternatives discussed in the DEIS, the American Sand Association (ASA) prefers Alternative 1. However, the ASA believes that some of the other alternatives, notably Alternatives 7 and 8 each have attractive features which could be combined into a potentially effective hybrid. Realigning the irregular boundaries of the Alternative 8 proposed *Astragalus magdalenae* var. *peirsonii* (PMV) critical habitat (CH) closures, increased signage and law enforcement during exceptional rainfall years along with clearly marked pass-through routes would provide a more manageable alternative. The ASA respectfully requests that Bureau of Land Management (BLM) consider and assess such an alternative in the Final EIS. The ASA's support of a hybrid alternative will depend

on the features that alternative would contain and the impacts it would create. The proposed consideration of "hybrid" alternative is provided in response to the last sentence on the first page of DRAMP "Abstract" which states *"The proposed decisions under this alternative (# 8) could be identical to those under one of the other alternatives presented or could be a combination of the features from several of the alternatives."*

The DRAMP has serious deficiencies. Specifically numerous proposed actions and recommendations are not supported by data germane to the proposal. The DRAMP is fraught with **superficial** and **incomplete** data particularly in the coverage of the biology and ecology of the PMV. The BLM has chosen to ignore a large body of published information and data regarding the distribution and ecology of the PMV. This omission renders many of the DRAMP recommendations invalid.

From: [Heatwole, Nick](#)
To: [Steward, Daniel](#)
Cc: [Wallis, Christopher \(Chris\) M](#); [Quamen, Nicole C](#); [Proffitt, Kimberly A](#)
Subject: Imperial Sand Dunes Draft Recreation Area Management Plan and Draft Environmental Impact Statement
Date: 08/06/2010 03:17 PM

BLM El Centro Field Office
RAMP Team Lead
1661 South 4th Street
El Centro, CA 92243

Dear Planning Team,

The Bureau of Reclamation's (Reclamation) Yuma Area Office has reviewed the Imperial Sand Dunes Draft Recreation Area Management Plan (Plan) and Draft Environmental Impact Statement (EIS). The Plan and EIS covered eight alternatives for managing the project area. Reclamation reviewed the analyses of the potential effects of the various alternatives on Reclamation's mission, structures, and facilities. The project area is located near the All American and Coachella Canals, which are important Reclamation projects. The preferred alternative identified in the Plan and EIS (alternative 8) will not negatively impact the All American or Coachella Canal or other Reclamation facilities or structures.

Reclamation also considered the effects of the Draft Plan and EIS on sensitive species in the area, especially the proposed threatened flat-tailed horned lizard (*Phrynosoma mcallii*) and Threatened mohave desert tortoise (*Gopherus agassizii*). The Plan and EIS will continue to implement or mirror the strategies of the Flat-tailed Horned Lizard Rangewide Management Strategy, which Reclamation has signed. Reclamation does not expect negative impacts to the flat-tailed horned lizard or the mohave desert tortoise due to implementation of the Plan and EIS.

Reclamation appreciates the opportunity to comment on this planning process. If there are any questions about the content of this letter, please direct them to Reclamation Environmental Protection Specialist Nick Heatwole by electronic mail at nheatwole@usbr.gov or by telephone at (928)343-8111. You may also reach Mr. Heatwole by mail at 7301 Calle Agua Salada, Yuma AZ 85364.

Sincerely,

Chris Wallis
Director, Resource Management Office

Nick Heatwole
Environmental Protection Specialist
U.S. Bureau of Reclamation
Yuma Area Office
7301 Calle Agua Salada
Yuma, AZ 85364

928-343-8111 office
928-503-0597 mobile
nheatwole@usbr.gov



August 5, 2010

RAMP Team Leader
Bureau of Land Management
1661 S. Fourth Street
El Centro, CA 92243

Dear RAMP Team Leader:

On behalf of the United Desert Gateway (UDG), I would like to submit the following comments in response to the March 2010 Draft Recreation Management Plan (DRAMP) and Draft Environmental Impact Statement (DEIS) for the Imperial Sand Dunes Recreation Area (ISDRA).

Of the alternatives presented in the DRAMP, the UDG prefers Alternative 1. However, we do feel that Alternatives 7 and 8 each contain beneficial features that, if combined, could create an effective hybrid. Realigning the irregular boundaries of the Alternative 8 proposed *Astragalus magdalenae* var. *peirsonii* (PMV) critical habitat (CH) closures, with increased signage and law enforcement during exceptional rainfall years, along with clearly marked pass-through routes, would provide a more manageable alternative.

The UDG respectfully requests that the Bureau of Land Management (BLM) consider and assess such an alternative in the Final EIS. The UDG could more easily support a hybrid alternative, but support would be dependent on the actual features contained in the alternative and the associated resulting impacts.

After much review, and discussion with ISDRA stakeholders, the UDG finds the DRAMP to contain serious deficiencies. The DRAMP is littered with incomplete data, particularly in the coverage of the biology and ecology of the PMV. It is our observation that important published information and data regarding the distribution and ecology of the PMV was not considered (and therefore not included) in the formation of the DRAMP. This has rendered many of the DRAMP recommendations invalid.

We also feel that there is not sufficient rationale to support such a major action as the rainfall-triggered camping closure of Dunebuggy Flats (DBF.) This proposal ignores historical closure compliance and assumes that BLM is incapable of enforcing closures, or of providing required enforcement resources.

In addition, the need for public safety CH pass-through corridors is not acknowledged. The preferred CH boundaries do not consider the topography of the dunes as it relates to public safety.

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Phone: 760.352.3681 • Fax: 760.352.3246

UDG DRAMP Comments 8/5/2010

General Comments

- This draft document does not include all the available documentation on the status of the *Astragalus magdalenae* var. *peirsonii* (PMV). All the available scientific documents about the PMV should be included in this Draft Recreation Management Plan (DRAMP), as the primary restrictions on recreation proposed in this document is based on the presence of the PMV in the recreation area. Therefore ALL pertinent information that has been published on the PMV must be included to allow the public to make an informed decision on the validity of the claims and on Bureau of Land Management's (BLM) proposed restrictions on recreation.
- The DRAMP proposes to restrict camping in Dunebuggy Flats (DBF) when a certain rainfall threshold is met, presumably to provide additional protection for the PMV. However, neither the camping closure nor the rain threshold that would trigger it are supported by technical studies or related data. A proposed camping restriction of this magnitude must have some scientific basis before it can be considered for adoption and implementation. For example, BLM must demonstrate why it believes the proposed rainfall threshold is correlated to increased PMV production. Likewise, BLM must demonstrate why it believes the proposed camping restriction is needed during these rain events to ensure PMV reproductive success. So far, no such demonstration has been made. As a result, the proposed camping closure in DBF should be removed from consideration.
- The DRAMP proposes to eliminate camping on the east side of the ISDRA from Wash 25 to Wash 69. According to the RAMP, this closure is necessary to protect the microphyll woodland habitat that exists in this area. While we recognize the value in protecting this important habitat type, the proposed camping closure is too large and not

- In the south dunes adjacent to the DBF campground, the CH creates a barrier between the Sand Highway on the west and the open area on the east. This barrier may result in incursions through the CH. As in the Mammoth Wash area discussed above, this problem could be eliminated by establishing a couple of travel corridors through this CH area at selected locations. These will allow for vehicle connections between the sand highway and the east open area. In addition, the travel corridors would permit emergency vehicles to access the open areas. Without designated connecting corridors, OHVs may travel through the CH areas at many different locations, potentially affecting PMV recovery efforts. A designated corridor, by contrast, will become the preferred route, sharply reducing unauthorized incursions into CH.

Comments on specific sections of the DRAMP

- **Page 1-2 Section 1.1.1**

- According to the RAMP/EIS, "*BLM seeks to provide a comprehensive management plan to . . . manage the Planning Area for recovery and delisting of the Peirson's milk-vetch (PMV; *Astragalus magdalenae* var. *peirsonii*) . . .*". However, the RAMP/EIS does not explain what constitutes "recovery" of the PMV. As there is no Recovery Plan for this species, BLM and the United States Fish and Wildlife Service (FWS) should articulate some criteria which, if met, would indicate that the PMV has recovered and may be considered for delisting.
- To the extent that BLM or FWS have identified recovery criteria for the PMV, please identify the technical data from which these criteria were derived.
- There is no Environmental Species Act (ESA) requirement to close areas that the FWS has designated as CH for the PMV. Therefore, the RAMP/EIS must provide a rationale for closing all PMV CH to recreational use. That is, BLM must explain why the closures are necessary to the conservation and recovery of the species.

three potential types of limited opportunities in the RMZ. The Limited RMZ is also managed under the NECO and WECO plans where OHV travel is permitted on designated routes.” The RAMP must add navigable washes to the list of places where OHV travel is allowed in the limited use area of the NECO plan.

- **Page 2-68 Section 2.3.14.4 (Limited Areas)**

- This section quotes the "California Desert Conservation Plan" (CDCA), which allows camping within 300 feet of the centerline of a route in Limited Use areas. Does this CDCA camping policy apply to the Ted Kipf Imperial County road? If not, please explain why not?
- Ted Kipf road is listed in Table 2-15 as a route of travel. As this area may see increased camping use with any the periodic closure of the Dunebuggy Flats campground, the RAMP should clearly state that camping is allowed along this route.

- **Page 3-133 - 3-147 Section 3.0 (Affected Environment)**

- There is no mention of the formation of the United Desert Gateway or its economic, educational, safety or data compilation contributions. The 2006 UDG Visitor Survey was utilized and cited in the Appendix.

- **Page 3-148 Section 3.18.4.3 On-Site Vendors**

- This section describes the on-site vendor situation as it currently exists. The vendor definitions are those contained in the 2003 RAMP.
- Appendix C seems to list vending requirements but is described as "Typical Management Actions and Best Management Practices" however this seems to be just boiler plate and does not seem to be actual requirements.
- The RAMP does not describe the requirements for on-site vending; nor does it address the concerns of the existing vendors which have been expressed to BLM over the last six years.

- **Appendix O**

- Photo at Page 8, Figure 3: This photograph has no business in this document. It is not germane to the discussion of bird monitoring at the ISD and is an inflammatory depiction of illegal OHV recreation. Moreover, it depicts a location that is not even within the ISDRA. Finally, there is no way to substantiate that this is fact illegal OHV operation. By including this photograph in the bird report, the authors betray an inherent bias against OHV activity, which in turn renders the study's analysis and conclusions suspect.
- On Page 18 of the study, the authors indicate that they had "severe problems" with key aspects of their analysis, including:
 - Heaping (low frequencies of detections close to the observer, with much higher frequencies at specific distances for each bird species);
 - Small sample sizes; and
 - Surveyor tendency to mis-record distances.

As a result of the problems, "abundance estimates based on estimates of detectability were not helpful in relating patterns of abundance to covariates in the study area." (Page 18) This inability to discern patterns of abundance largely eviscerates the entire bird study and its conclusions.

- Ultimately, the RAMP/EIS should be careful **not** to rely heavily on the bird study for assertions that OHV use reduces bird abundance and diversity in the microphyll woodlands of the east dunes. The study itself cautions against drawing such conclusions: "Although we have found significantly more breeders and migrants at non-OHV use sites within the North Algodones Dunes Wilderness, these differences should not be assumed to result from recreation pressure alone. Rather, the habitat within the North Algodones Dunes Wilderness may simply be of higher quality than habitat outside the Wilderness." (Page 19)
- In addition, the authors of the bird study could not fully explain why the surveyors detected so many birds in the dunes wilderness. According to pages 20 and 21 of the report, the

percent of monitored plants are damaged by OHV operation. This statistic is consistent for monitoring of PMV (Page H-2, H-3 and H-6) and Algodones Dunes Sunflower (Page H-4, Section A.2).

- Data from other referenced studies show that many plants consistently show increased levels in areas open to OHV recreation. This has been shown in the BLM PMV monitoring and the Luckenbach and Bury report on page H-8. Quoting this report "*...what data were collected showed that PMV density and cover were actually higher in the OHV area than in the closed area...*"
- It seems that neither the BLM nor FWS can explain why these plants seem to do as well in areas open to OHV than in areas closed to OHV recreation.
- Data such as this would question the advisability and need to restrict camping in areas adjacent to the proposed closed areas.

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RECEIVED
BUREAU OF LAND MANAGEMENT
2010 AUG -5 PM 3:52
EL CENTRO OFFICE
EL CENTRO, CA

August 4, 2010

RAMP Team Lead
Attn: Erin Dreyfuss
1661 South 4th St.
El Centro, CA 92243

Dear Erin,

I am writing to comment on the 2010 DRAMP and the effect it could have on the general off roading public.

I have been an avid user of the dunes for 10 years and without question has provided the best times I have ever had with both my family and friends. I have attended a number of meetings regarding the dunes and the care of them. We always carry trash bags and pick up any litter we may find. We use the dunes in a responsible way and encourage others to follow.

After reviewing the RAMP alternatives I would like to express my concern and state a preference to a RAMP alternative.

While all the closures south of Highway 78 are a concern for safety and the continuing closures of public lands, I think a combination of plan #7 and #8 is preferred.

To close the Southern area of Gordon's Well would cause a significant impact on the open areas during the wet season and create a safety issue. The closures keep cramming more and more people into a smaller and smaller area.

Secondly, a realignment of the existing closures would reduce the number of incursions. The area North of Highway 78 was set aside to "preserve" the habitat and the weeds the environmentalists are trying to protect. What about the public's right to enjoy public lands?

To recap:

- The need for additional closures for critical habitat is unfounded.
- Closures of camping areas are unwarranted.

I hereby request that the selected RAMP alternative have a minimal impact in accordance with the concerns as outlined in my letter.

Respectfully submitted,


Wayne Lee

From: craig sparks <wildnature@earthlink.net>
Subject: Re: Erin Dreyfuss is out of the office.
PostedDate: 07/22/2010 04:10:36 PM
SendTo: Erin_Dreyfuss@blm.gov

Please do all you can to protect our commonly owned sand dunes from the ravages of ATV and ORV's
There is plenty of land already destroyed for them to "run on" without destroying more.
It's the very least you can do for the Wildlife the calls the dunes home.
besides, it's the morally right thing to do as well.
thanks
Craig Sparks

PostedDate: 07/23/2010 08:20:33 AM
From: Marie Wheatley <rivermaria2004@yahoo.com>
ReplyTo: rivermaria2004@yahoo.com
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

Please do not allow large amounts of unrestricted off-road vehicle (ORV) on the Algodones Dunes area. This is habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. Any additional areas to ORV use would harm rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these areas provide.

Thank-you for your time.

Marie Wheatley
5801 Goener
St. Louis, MO 63116
US

PostedDate: 07/22/2010 01:11:48 PM
From: Donn Nay <nays5@sbcglobal.net>
ReplyTo: nays5@sbcglobal.net
SendTo: edreyfus@ca.blm.gov
Subject: Protect the Algodones Dunes

I strongly support the expansion of OHV use in the Algodones Dunes.
Endangered species are more than sufficiently protected. Families that
recreate in these dunes need more area to avoid over-crowding and over-
use
of the existing small percentage of open area.

Donn Nay
1820 North Naomi
Burbank, CA 91505
US

CBD comments.txt

----- Forwarded by Erin Dreyfuss/CASO/CA/BLM/DOI on 08/10/2010 07:33 AM

"Ileene Anderson"
<ianderson@biologicaldiversity.org
>
08/09/2010 08:56 PM
To
<caisdrmp@ca.blm.gov>,
<edreyfus@ca.blm.gov>
cc
<Ken_Corey@fws.gov>,
<KHUNTING@dfg.ca.gov>,
<steckel.andrew@epa.gov>, "'Lisa
Belenky'"
<lbelenky@biologicaldiversity.org>,
'Brendan Cummings'
<bcummings@biologicaldiversity.org>
Subject
CBD comments on Algodones Dunes
Draft RAMP/EIS

Hello Erin and all,
Please find attached the Center for Biological Diversity's comments on the Draft RAMP/EIS for the Algodones Dunes. I will be sending a hardcopy to you Erin along with a CD of all of the references (they are too large to email). If anyone else would like a hardcopy of these comments and/or the references, please let me know. Please feel free to contact me if you have any questions too.

Best regards,
Ileene Anderson

Ileene Anderson
Biologist/Public Lands Desert Director
Center for Biological Diversity
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"Our good fortune will only last as long as our natural resources" Will Rogers
Please consider the impact on the environment before printing this e-mail.

Get the latest on the BP oil spill on the Center's new Gulf Disaster website, updated daily. (See attached file: CBD comments DEIS AD RAMP final 8-9-10.pdf)



sent via electronic mail and USPS mail

August 9, 2010

BLM El Centro Field Office
1661 S. 4th Street
El Centro, CA 92243
caisdrmp@ca.blm.gov

RE: Comments on the Draft Imperial Sand Dunes Recreation Area Management Plan/Draft Environmental Impact Statement (Draft RAMP/EIS) for the California Bureau of Land Management (BLM) El Centro Field Office, Dated March 2010.

To whom it concerns,

These comments are submitted on behalf of the Center for Biological Diversity's 255,000 staff, members and on-line activists in California and throughout the western states, regarding the Draft Imperial Sand Dunes Recreation Area Management Plan/Draft Environmental Impact Statement (Draft RAMP/EIS) for the California Bureau of Land Management (BLM) El Centro Field Office, dated March 2010. Because the Imperial Sand Dunes (also known as the Algodones Dunes) is the largest dunes system in the continental United States, they are a destination spot for visitors world wide. Additionally many plants and animals are endemic to these dunes. Many of the Center for Biological Diversity (Center)'s staff and members regularly visit the Algodones Dunes to hike, photograph, camp, bird, botanize and appreciate this unique dune system.

The Planning Area comprises approximately 214,930 acres of BLM-administered land in Imperial County, in the southeastern corner of California, covering an area more than 40 miles long and averaging 5 miles in width. The area also includes a few sections of non-federal lands (Draft RAMP/EIS at Map 2-5). Managing the rare resources on the Algodones Dunes is required under Federal Land Policy and Management Act, the Endangered Species Act, the Sikes Act, the California Endangered Species Act, the National Historic Preservation Act, the National Natural Landmarks Program, the Clean Air Act, Presidential Executive Order 13007, and Presidential Executive Order 12898, Presidential Executive Order 11644, Presidential Executive Order 11989, and applicable Bureau of Land Management policy, handbook codes, and regulations. Unfortunately, the Draft RAMP/EIS is grossly inadequate in proposing alternatives that truly meet the requirements of these laws and statutes. The issues of concern are set forth below in detail¹. The Center opposes all of the proposed alternatives, including preferred alternative 8

¹One initial comment concerns the spacing of the type in the Draft RAMP/EIS – the awkward spacing of the type made the document very challenging to read and we request that the supplemental RAMP/EIS use a more easily
Arizona • California • Nevada • New Mexico • Alaska • Oregon • Montana • Illinois • Minnesota • Vermont • Washington, DC

which allows for the greatest amount of off-road vehicle access of any of the alternatives to the unique biological island that is the Algodones Dunes, and the plants and animals that call this island home.

a. THE RAMP FAILS TO PROVIDE A FULL RANGE OF ALTERNATIVES

NEPA requires federal agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. §4332(2)(E). NEPA requires that an EIS contain a detailed statement of alternatives to the proposed action. A full discussion of alternatives, including the proposed action, is the "heart" of the EIS. 40 C.F.R. § 1502.14. *Natural Resources Defense Council v. United States Forest Svc.*, 421 F.3d 797, 813 (9th Cir. 2005). The EIS must "rigorously explore and objectively evaluate all reasonable alternatives," in order to "provid[e] a clear basis for choice among options by the decision maker and the public." 40 C.F.R. § 1502.14(a); *see also Ilio'ulaukalani Coalition v. Rumsfeld*, 464 F.3d 1083, 1095 (9th Cir. 2006) (holding EIS inadequate for failing to consider reasonable alternative of "transforming" the army elsewhere). An EIS must "inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1; *see also Lands Council v. McNair*, 494 F.3d 771, 777 (9th Cir. 2007); *Northwest Environmental Advocates*, 460 F.3d at 1134; *Earth Island Inst. v. United States Forest Svc.*, 442 F.3d 1147, 1153-54 (9th Cir. 2006) ("NEPA requires that a federal agency consider every significant aspect of the environmental impact of a proposed action and inform the public that it has indeed considered environmental concerns in its decision making process.").

Specifically, NEPA requires that the preparing agency "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated for detailed study, briefly discuss the reasons for their having been eliminated...[and d]evote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits." 40 C.F.R. § 1502.14. Failure to include the full range of alternatives renders the EIS inadequate as a matter of law. The most fundamental requirement underpinning NEPA is that an agency considers a full range of reasonable alternatives for the action proposed in preparing either an environmental assessment ("EA") or environmental impact statement ("EIS"). *City of Carmel-by-the-Sea v. United States Dep't of Transp.*, 123 F.3d 1142, 1155 (9th Cir.1997); *Center for Biological Diversity v. Bureau of Land Management*, 422 F.Supp.2d 1115, 1158-59 (N.D. Cal. 2006). Because the consideration of an appropriate range of alternatives is so important to the NEPA process, "[t]he existence of reasonable but unexamined alternatives renders an EIS inadequate." *Ilio'ulaukalani Coalition v. Rumsfeld*, 464 F.3d 1083, 1095 (9th Cir. 2006). *See also Resources Ltd., Inc. v. Robertson*, 35 F.3d 1300, 1307 (9th Cir. 1993)). *See also Alaska Wilderness Recreation and Tourism Ass'n v. Morrison*, 67 F.3d 723, 729 (9th Cir. 1995).

readable type.

While the Draft RAMP/EIS presents an alternative that is the current situation of the 49,310 acres of the Algodones Dunes in the Northern, Small Central, Large Central and the Southern Closures, (as per the settlement agreement of 2000) in addition to the Wilderness area as Alternative 2, the range of alternatives is still inadequate. For example, it still fails to include in any alternative a capacity limitation for the number of people on the dunes at any one time. Increasing use and visitation in the past at the Algodones Dunes along with the inability of law enforcement to safely and effectively handle illegal activities, much less protect the fragile resources (not only on the Dunes but elsewhere in the CDCA), require that the Draft RAMP/EIS evaluate limits on the number of visitors that can safely access the Dunes at one time – a carrying capacity limit. As much as this is a resource issue, it is more of a human safety issue. As the BLM's own visitation estimations indicate – the trend is for increasing visitation (at 3-113) and tragic human fatalities (at 3-129). Additionally the data indicate that the highest visitation is primarily occurring coincidental with the growing and reproductive windows for many of the rare and common biological resources that rely on the dune habitat. This important concept could have been included as a component in all of the alternatives, but was not.

Additionally, a majority of the remaining proposed alternatives in the Draft RAMP/EIS allow for increased ORV use including the proposed preferred alternative which allows the most amount of habitat for dunes species to be open to ORVs.

All of the proposed alternatives fail to present data to show that they could support the goals of the Draft RAMP (at 2-11) which include:

- Maintain viable populations of all native species throughout the Planning Area.
- Maintain habitat connectivity throughout the Planning Area to limit habitat fragmentation and maintain transfer of genetic material from all sub-populations.
- Protect biological diversity through conservation of native plant communities and special status species with consideration for multiple uses of the land and sustained ecological function.
- Maintain and enhance a mosaic of native plant communities.
- Promote wildlife forage and habitat values, and maintain and/or restore intrinsic biological integrity and value of all native plant communities.
- Protect or restore native species through an integrated weed management approach emphasizing prevention, early detection, and eradication of invasive non-native plants.
- Ensure that plant communities continue to support wildlife in a manner consistent with other resource management practices or uses.
- Promote natural processes that secure soil resources and protect against erosion and air quality degradation.

It has long been documented that ORVs negatively impact important biological resources on the Algodones Dunes (Luckenbach and Bury 1983). The Draft RAMP/EIS fails to do a thorough job of analyzing the alternatives. According to § 1502.24 of NEPA, “agencies shall ensure ... scientific integrity, of the discussions and analyses in environmental impact statements.”

b. THE DRAFT RAMP/EIS FAILS TO COMPLY WITH NEPA

NEPA “recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.” 42 U.S.C. § 4332(c). The RAMP/EIS fails present credible methods for achieving goals of habitat monitoring and many other issues as described below.

1. Baseline Data is Missing

A primary flaw in the Draft RAMP/EIS is that BLM has not gathered and analyzed the baseline information necessary to determine the direct and indirect impacts of the project, as required by NEPA. BLM must “describe the environment of the areas to be affected or created by the alternatives under consideration.” 40 C.F.R. § 1502.15. Establishing baseline conditions of the affected environment is an essential requirement of the NEPA process. In *Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988), the Ninth Circuit stated that “without establishing...baseline conditions...there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA.”

Many examples are given below where BLM has specific responsibility for the species within the management area. For example, the desert tortoise (*Gopherus agassizii*) is listed as threatened under the Endangered Species Act (ESA), and yet the BLM cannot possibly foresee potential impacts of the RAMP on the tortoise because “to date, limited surveys for desert tortoise have been conducted within the Planning Area. Limited desert tortoise distribution and abundance data currently exist.” (at 3-39). Though considered rare within the management area, tortoises have been seen on the Vista Mine and Ted Kipf Roads (at 3-39). The BLM proposes to Monitor for desert tortoise “as funding and staffing levels allow” and in “areas to be determined” (at D-3). Because such a proposal does not provide present *baseline* data against which the future effects of management actions on tortoise populations can be evaluated, BLM has therefore failed to collect adequate baseline data on the tortoise as required under NEPA.

BLM was a signatory to a 1987 Algodones Dunes Wildlife Habitat Management Plan (HMP) created under the terms of the Sikes Act. Two of the BLM’s objectives under this plan were to “determine the status of species of special management concern” and to “evaluate resource trend within the Wildlife Habitat Area, and its relationship to levels of recreational use.” (HMP at 13). BLM had a specific responsibility to establish baseline conditions and to monitor population trends in order to ascertain whether federal and state-listed and other sensitive species were being harmed. Wildlife present at the Algodones Dunes that fell under this rubric included Couch’s spadefoot toad (*Scaphiophus couchi*), Andrew’s dune scarab beetle (*Pseudocotalapa andrewsi*), Flat-tailed horned lizard (*Phrynosoma mcallii*), and Colorado Desert fringe-toed lizard (*U. notata*). In the more than 23 years since the HMP was signed, BLM has apparently conducted no surveys for the first two species in the planning area and only limited surveys for the others. The resulting lack of baseline data for analysis during the preparation of the Draft RAMP/EIS is again representative of the document's inadequacy under NEPA.

Absent such baseline data, monitoring plans will be of limited use. The lack of baseline data for these species renders inadequate BLM's analysis under NEPA.

Other species of special concern have been linked with the Algodones Dunes subsequent to the WMP. These include Arizona Bell's vireo (*Vireo bellii arizonae*; state endangered), Burrowing owl (*Athene cunicularia*; BLM sensitive), Gila woodpecker (*Melanerpes uropygialis*; state endangered), LeConte's thrasher (*Toxostoma lecontei*; BLM sensitive). However, BLM provides no information that surveys have been conducted in the planning area for these species. Once again, this lack of baseline data represents a serious flaw in BLM's NEPA analysis.

The Algodones Dunes host one of the most unique and diverse concentrations of endemic invertebrates in North America. Despite the review of some of the rare invertebrate species (Appendix G), the Draft RAMP/EIS does not analyze the impacts of ORV use on endemic and rare invertebrates.

2. Biological Resources Impact Analysis is Flawed

Off-road vehicle (ORV) activities are known to cause wide-ranging and serious damage to biological resources (and other resources) (Ouren et al. 2007). The analysis of impacts to biological resources under the different alternatives is woefully inadequate. Basic baseline information on species distribution and populations are not presented. No monitoring methodologies are provided. Examples of species specific inadequacies are addressed below:

Peirson's milkvetch (*Astragalus magdalanae* var. *peirsonii*)

While we support the protecting critical habitat for the Peirson's milkvetch and not allowing development or off-road activities within the boundaries of the current designation, we note that not all of the locations where the federally threatened plants occur are within the boundaries of the designated critical habitat. Therefore, in order to "avoid adverse impacts to special status species..." (at 2-12) and specifically for the milkvetch "Promote population increase and protect habitat necessary to promote recovery" (at 2-28), all of the alternatives fall short of protecting this rare species from impacts outside of designated critical habitat. In order to achieve these important goals additional safeguards must be put in place to protect the plants outside of the boundaries of critical habitat. Groom et al. 2007 found that density estimate comparisons indicated 4–5 times fewer plants occupied a study area open to ORVs relative to two nearby study areas legally closed to ORVs. Additionally Groom et al. suggest that periodic closure of Peirson's milkvetch habitat during favorably wet years would assist in ensuring its productivity and persistence. However, this alternative as not included for Peirson's milkvetch habitat areas outside of critical habitat, except for the proposed closures of Dune Buggy flats and/or Gecko campgrounds under 2 alternatives. Additional habitat and plants occur outside of those campground areas.

Indeed, exactly how the boundaries of the critical habitat for Peirson's milkvetch, with its irregular boundaries, will be protected is not discussed in the document and doubts exist that is actually is a defensible boundary.

Unfortunately the proposed monitoring plan for the Peirson's milkvetch is woefully inadequate. First, it is proposed to occur only "in years when 1.82-inch rainfall threshold during October, November, and December is met" and in "areas to be determined" (at pg D-3). BLM has had a long history of adequately monitoring the Peirson's milkvetch annually since 1998. In light of global climate change with the documented movement of species to higher elevations (Kelly and Goulden 2008), monitoring needs to occur more regularly in order to evaluate the habitat of the Peirson's milkvetch. Habitat loss is confounded by climate change (Pyke 2004) and in the case of the Algodones dunes could significantly affect the persistence of the Peirson's milkvetch (as well as other dunes endemics). By limiting monitoring only to those years with 1.82-inch rainfall could conceivably eliminate monitoring for the milkvetch if climate change modeling proves correct and the southwest desert are warmer and drier. At a minimum consistent monitoring should be included for the Peirson's milkvetch. Additionally, methodology for monitoring should be identified, and that methodology should be analytically compatible with the current monitoring regime so that data can be successfully compared over time.

Flat-tailed horned lizard (*Phrynosoma mcallii*)

The Draft RAMP/EIS is totally inadequate in addressing impacts to flat-tailed horned lizard. As the agency should be well aware, the flat-tailed horned lizard is once again proposed to be listed under the Federal Endangered Species Act, yet Table 3-6 (at pg. 3-34) fails to include this designation. Despite the establishment of flat-tailed horned lizard Management Areas and the 2003 flat-tailed horned lizard Management Strategy, this species is still threatened with extinction primarily from habitat destruction. The Draft RAMP/EIS fails to identify how many acres of flat-tailed horned lizard habitat occur in the planning area, nor does it provide baseline quantitative information on the status of the flat-tailed horned lizard within the planning area. In fact, the document appears to dismiss the flat-tailed horned lizard within the planning area. The document fails to include any systematic monitoring protocol, relegating "monitoring" to "sighting recordation" (at pg. D-3). As the agency knows, flat-tailed horned lizard's predator evasion strategy is crypsis and non-movement, making them very difficult to detect (Grant and Doherty 2007, Wone and Beauchamp 2003). "Sighting recordation" is wholly unreasonable as "monitoring" in "areas to be determined" (at pg. D-3). The lack of adequate baseline information on the flat-tailed horned lizard in the planning area coupled with the lack of analysis of impacts from the proposed activities specifically on flat-tailed horned lizard habitat completely fails meet the agency's responsibilities under the law. Because essentially no monitoring will be done for this imperiled species, this document is unable to assure that further declines because of proposed activities will not cause additional harm to the flat-tailed horned lizard. In fact, it is likely that further degradation of habitat will occur under all of the alternatives.

Studies in other flat-tailed horned lizard habitat document greater numbers of flat-tailed horned lizards in areas with narrower ORV tracks and trails (Beauchamp et al. 1998), suggesting that the wider and greater number of ORV tracks and trails tend to eliminate or displace flat-

tailed horned lizards, as would be the case in habitat areas that are open to ORV activities on the Algodones Dunes.

Particularly concerning is the impact that off-road vehicles have on both compaction of the stabilized dunes and abundance of harvester ants especially in the stabilized sand fields that the flat-tailed horned lizard calls home (Barrows and Allen 2010). Recent literature indicates that compaction of sand and presence of harvester ants are crucial to the species persistence (Barrows and Allen 2009), yet no monitoring of even these indicators of habitat for flat-tailed horned lizard are proposed.

Many of the proposed alternatives including the preferred alternative would actually reduce the existing East Mesa ACEC by 650 acres (at 2-46). The ACEC was established to protect the flat-tailed horned lizard. Clearly this is not beneficial to the conservation of the flat-tailed horned lizard and should be abandoned.

Andrew's dune scarab beetle (*Pseudocotalpa andrewsi*)

While the Andrew's dune scarab beetle is not endemic to the Algodones (Appendix G, pg. 44), most of its known habitat (dunes) are within the boundaries of the planning area. The Draft RAMP/EIS fails to identify or quantify habitat areas for this rare species. Nor does it actually evaluate the potential impacts from the proposed activities to the species, despite identification that "anything that affects their host plants could seriously impact the species" (Appendix G, pg. 44). A supplemental EIS needs to evaluate the impacts to this rare species, particularly in light of the fact that the preferred alternative would allow for impacts to 84% of the planning area, of which an unknown amount is habitat for the Andrew's dune scarab beetle.

Additionally no monitoring is assured for this species. Invertebrate monitoring will occur "as funding and staffing levels allow" and in "areas to be determined" (at D-3). Based on the proposed alternatives, significant impact to the Andrew's dune scarab beetle and its habitat could occur, and absent a commitment to monitor them, data continue to be unavailable on the status of their populations within the planning area.

In addition, surveys for Andrew's dune scarab beetle have apparently not been conducted since 1990 despite being explicitly required by the 1987 Wildlife Habitat Management Plan, to which the BLM is a signatory. Because it has not conducted these surveys, BLM argues that "current information about [the beetle's] distribution and preferred habitat within the planning area is not available." (at 3-31). But BLM had an explicit duty to gather this information. Its failure to do so is not a valid reason to omit from the Draft RAMP/EIS any consideration of possible environmental impacts to the Andrew's dune scarab beetle that may result from the management alternatives.

Moreover, as discussed below in greater detail, the Draft RAMP/EIS completely fails to analyze the impacts of the alternatives on the endemic invertebrate fauna in the planning area.

Other endemic and rare invertebrates at the Dunes

In all, the Draft RAMP/EIS identifies twenty-one species of insects that are endemic to the Algodones dunes, plus additional seven that are dunes endemic, but found on dunes other than the Algodones (Appendix G). Despite the acknowledgement that “BLM recognizes that the insect sampling done thus far is incomplete”, information on some species’ habitats are available. For example, the Algodones Dunes sand wasp is “restricted to dune areas with active slip faces, around the base of shrubs where detritus accumulates... shallow nests are built in the soil...” (Appendix G, pg. 15). Clearly information is available to allow for an evaluation of this endemic species habitat, and subsequently an analysis of impacts from the proposed alternative actions. While we recognize that this may not be possible with all of the species, the agency must do due diligence in evaluating impacts to the species that have habitat information available in the supplemental EIS.

As with the Andrews Dune scarab beetle, no monitoring or gathering of additional basic ecological information is assured for any of these rare species. Invertebrate monitoring will occur “as funding and staffing levels allow” and in “areas to be determined” (at D-3). Absent a commitment to fund additional surveys will leave the agency in the position of possibly driving rare species to the brink of extinction from the proposed activities.

The Draft RAMP/EIS proposes to “use vegetation as a surrogate for insects in its analysis of the potential impacts the alternatives may have on insects. BLM would assume that by protecting sufficiently large acres of each habitat type, the insects that rely upon these plants would also be protected.” (at 3-32). However, it is unclear for example that keeping only 23% of psammophytic vegetation or 30% of the microphyll woodlands closed to ORVs (at 4-17) is adequate to enable these species to successfully persist. Additionally, Wilson et al. (2009) found that dune conservation strategies that relied on preservation of “representative” portions of dune systems may be insufficient to protect insects and the pollination services they provide.

As surveys have documented (Luckenbach and Bury 1983, Groom et al. 2007), ORVs decrease vegetative cover and therefore also decrease the carrying capacity for these rare insects. The Draft RAMP/EIS must clearly outline a path to prevent decreases in these rare insects, through safeguarding habitat and routine monitoring.

Colorado Desert fringe-toed lizard (*Uma notata*)

The Draft RAMP/EIS acknowledges that impacts would occur to the Colorado Desert fringe-toed lizard under all of the alternatives (at 2-106), included the proposed preferred alternative where 77% of its habitat is proposed to be open to ORVs (at 4-17). The Colorado Desert fringe-toed lizard is known to burrow shallowly – only 0.5-4.0 centimeters (Pough 1970), leaving them vulnerable to impacts from being run over by ORVs. In addition to those impacts, the lizards may likely sustain impacts to hearing from the noise of ORVs as ORV activity will be focused on the same psammophytic habitat that is home to the Colorado Desert fringe-toed lizard (at 4-31). Like other species, these impacts to the Colorado Desert fringe-toed lizard are not quantitatively identified. Impact to 77% of the Colorado Desert fringe-toed lizard’s habitat under

the proposed preferred alternative is clearly a significant impact to this species. Yet the Draft RAMP/EIS fails to identify the level of impact or propose any scenario to offset impacts.

No monitoring is assured for this species, either. Monitoring for Colorado Desert fringe-toed lizard will occur “as funding and staffing levels allow” and in “areas to be determined” (at D-3). Based on the proposed alternatives, significant impacts to the Colorado Desert fringe-toed lizard and its habitat could occur, and absent a commitment to monitor them, data continue to be unavailable on the status of their populations within the planning area.

Because the Colorado Desert fringe-toed lizard is a dune endemic with limited vagility, the impending habitat changes from climate change are likely to be problematic (Ballestreros-Barrera et al. 2007). This aspect of species vulnerability coupled with the proposed actions in the alternatives is not addressed within the Draft RAMP/EIS and needs to be included in a supplemental document.

Algodones Dunes sunflower (*Helianthus niveus* ssp. *tephrodes*) – a State endangered species, Wiggin’s croton (*Croton wigginsii*) – State listed rare species, Sand food (*Pholisma sonora*), Giant Spanish needle (*Palafoxia arida* var. *gigantea*), and other rare plants

Despite numerous years of surveying and documenting abundance of these species on the Algodones dunes (BLM 2000, 2001, 2003, 2004, 2005), no data on these species is presented in the Draft RAMP/EIS. Clearly habitat for these species could be identified from this data set. No impact analyses of the proposed alternatives on these rare species are included. As with the Peirson’s milkvetch (Groom et al. 2007), the impacts to these rare species from ORVs is currently occurring, and safeguards must be put in place to prevent population declines to the point where Endangered Species Act protection is required.

The Draft RAMP/EIS’ management action for the Algodones Dunes sunflower includes “Implement a monitoring plan for the Algodones Dunes sunflower. Analyze the monitoring data to compare the trend in species abundance due to the different types of impacts in each area” (at 2-31). However no monitoring is assured for this species or any other rare plant species, despite BLM’s history of annual monitoring. Monitoring for “Algodones Dunes sunflower; Wiggins’ croton; Other special status species” will occur “as funding and staffing levels allow” and in “areas to be determined” (at D-3). Based on the proposed alternatives, significant impacts to these rare plant species and their habitats could occur, and absent a commitment to monitor them, data continue to be unavailable to evaluate the status of their populations within the planning area.

Ironically for the Wiggin's Croton the management action is “Analyze impacts of all projects occurring within occupied Wiggins’ croton habitat and require that projects mitigate the impacts accordingly” (at 2-32). However, the impacts for the proposed alternatives are not analyzed in the Draft RAMP/EIS, nor are the impacts mitigated.

Sand food management actions are stated as “Implement a monitoring plan for sand food (*Pholisma sonora*), a priority plant species” (at 2-15). As state previously, no monitoring is assured (at D-3).

The giant Spanish needle simply has no management actions associated with it in the Draft RAMP/DEIS.

Gila woodpecker (*Melanerpes uropygialis*) and Arizona Bell’s vireo (*Vireo bellii arizonae*) - a State Endangered species

As with the Wiggin’s Croton, the management action for the Gila woodpecker and the Arizona Bell’s vireo is “Analyze impacts of all projects occurring within occupied Gila woodpecker habitat and require that projects mitigate the impacts accordingly” (at 2-32 and 2-33 respectively). However, the impacts for the proposed alternatives are not analyzed in the Draft RAMP/EIS, nor are the impacts mitigated.

Desert Tortoise

Despite the fact that most of the planning area is not suitable habitat for desert tortoise, the federally threatened desert tortoise does occur at low densities on the edges of the planning area. While Map 3-3 shows the location of adjacent critical habitat for the desert tortoise, no information is provided as to the location of desert tortoise habitat within the planning area. No acreage figure is provided for any category of desert tortoise habitat in the planning area.

The Draft RAMP/EIS acknowledges that habitat for desert tortoise in the vicinity of the planning area has already “has been degraded and fragmented by OHV and camping recreation” (at 3-29), yet the Draft RAMP/EIS alternatives propose to allow camping or ORV recreation in desert tortoise habitat. Additional management actions include:

- Review land use requests on a case-by-case basis. Requests may be denied or require mitigation to achieve Goals and Objectives.
- Compensate for loss of Mojave desert tortoise habitat in accordance with the Desert Tortoise Compensation Team report (1991).
- Limit activities that would fragment or further isolate existing populations of Mojave desert tortoises (e.g., canals, highways).
- Reduce the attraction of predators through proper management of garbage.
- Reduce take of Mojave desert tortoises, by injury or death, through proper mitigation measures.

(at 2-30). However, the proposed alternatives appear to conflict with several of these management actions, including compensation for loss of desert tortoise habitat, additional fragmentation could easily occur, the ability to manage garbage, and no mitigation measures are proposed to reduce take of tortoises from the proposed alternatives.

While the document recognizes the impacts associated with the Draft RAMP from ORV activities including “direct mortality by crushing tortoises on the surface or in burrows; indirect mortality through habitat alteration from soil compaction; vegetation destruction (direct or

indirect); and, toxins from exhaust” and indeed admit that “in heavy OHV recreation areas, evidence has shown that desert tortoise population densities decline (Boarman 2002)” (at 4-30). All of the proposed alternatives would have an adverse impact on tortoise (at 4-34), but no avoidance or mitigation strategy is proposed.

Additionally, no monitoring is assured for this species. Monitoring for desert tortoise will occur “as funding and staffing levels allow” and in “areas to be determined” (at D-3). Based on the proposed alternatives, possible significant impacts to the desert tortoise and its habitat could occur, and absent a commitment to monitor them, data continue to be unavailable to evaluate the status of their populations within the planning area.

Other BLM Sensitive Mammals, Birds, and Amphibians

Other BLM sensitive mammals, birds, and amphibians include:

- Spotted bat - *Euderma maculatum*
- California leaf-nosed bat - *Macrotus californicus*
- Cave myotis - *Myotis velifer*
- Townsend’s big-eared bat - *Plecotus townsendii*
- Burrowing owl - *Athene cunicularia*
- LeConte’s thrasher - *Toxostoma lecontei*
- Lowland leopard frog - *Rana yavapaiensis*
- Couch’s spadefoot toad - *Scaphiopus couchi*

As with the rare species in above sections, no amount of habitat for any of these species is identified, and no impact analysis is provided. No avoidance, minimization or mitigation is proposed. No monitoring is proposed for these species.

In all, concerns relating to the enforcement of BLM’s responsibilities to biological resources remain. If ORVs are causing or will cause “considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources,” BLM is to immediately close an affected area until those adverse effects are eliminated and measures to prevent their recurrence are instituted. 43 CFR 8341.2. Absent committed monitoring, detection of effects is impossible.

We also have concern relating to the enforcement of BLM’s responsibilities to biological resources. If ORVs are causing or will cause “considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources,” BLM is to immediately close an affected area until those adverse effects are eliminated and measures to prevent their recurrence are instituted. 43 CFR 8341.2. BLM acknowledges this responsibility and its use in the Draft RAMP/EIS (at 1-12), yet gives no sign of how it will monitor adverse effects, institute temporary closures, or otherwise fulfill these obligations throughout the planning area.

2. Law enforcement and public safety

The Draft RAMP/DEIS fails to include a plan that assures adequate law enforcement to ensure public safety. While we support cooperative agreement with local and state law enforcement officials, the document fails to identify the level of law enforcement that will occur on the dunes especially during popular holiday weekends. The highest level of law enforcement on the “biggest” weekend – Thanksgiving weekend – was only 62 (in 2008 [at 3-131]) when on average over 181,258 people are at the dunes. This number of law enforcement is inadequate to handle the emergencies and enforcement, much less protection of resources. Furthermore, the current level of law enforcement is supported by a temporary grant (at 3-150), which can not be counted on for funding in perpetuity. By limiting the number of people that access the planning area especially during the popular holiday weekends, the limited law enforcement resources would be better able to handle enforcement issues.

The Draft RAMP/DEIS also does not analyze how the focus of meager law enforcement staff on the popular holiday weekends at the Algodones dunes jeopardizes the resources in the rest of the CDCA from lack of staff in other areas. It is common knowledge that law enforcement resources will be focused on the dunes, leaving other areas vulnerable to illegal activities.

With regards to Border Patrol activities and enforcement, the Draft RAMP/DEIS fails to include an alternative that closes the area south of Interstate 8 to all but Border Patrol and other law enforcement activities as requested in our scoping comments of May 30, 2008. This alternative is a reasonable alternative based on the on-going border issues that occur on the Algodones dunes, which will reduce unsafe encounters with speeding law enforcement vehicles, smugglers, and other border related hazards.

3. Global climate change

As discussed further in the air quality section, only Alternative 3 would actually decrease the amount of CO₂ emissions from dune activities. Also like the air quality section, the calculations of CO₂ emissions do not include the contributions from visitors traveling to the Algodones dunes.

The modeling that was performed for the Draft RAMP/EIS includes only CO₂ emissions however other sources of green house gases may also be present from the proposed alternative actions.

Federal courts have squarely held that NEPA requires federal agencies to analyze climate change impacts when evaluating projects. *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 508 F.3d 508 (9th Cir. 2007). NEPA requires consideration of greenhouse gas emissions (“GHG emissions”) associated with all projects even land use planning and, in order to fulfill this requirement, the BLM should look at all aspects of the proposed plan which may lead to greenhouse gas emissions including ORV use at the dunes, travel too and from the dunes, and loss of intact vegetation and soils that may capture some greenhouse gases.

The Draft RAMP/EIS fails to present ways to reduce, avoid, and minimize greenhouse gas emissions and off-set those that cannot be avoided or minimized despite Secretarial Orders # 3226 and 3289 on Global Climate Change (included in references). Additionally a GAO report (2007) found that all federal agencies should develop guidance for considering climate change in planning related to Federal land and water resources but there is little evidence that BLM has done so here.

4. Socioeconomics

The Draft RAMP/EIS fails to look at the negative impacts associated with injuries from ORV use and the expenses related to the extra law enforcement required in the planning area, especially during popular holiday weekends. Furthermore, due to the document's failure to include recreational activities other than ORVs, the agency never assesses the economic impacts of non-ORV recreationists. Many counties receive a substantial amount of economic benefit during birding and wildflower seasons at the Algodones Dunes.

5. Land Use/Ownership

Several private parcels of land are located within the planning area. The Draft RAMP/EIS provides no analysis of the impacts of the alternatives to any of these lands. In 2001, off readers in a single weekend significantly vandalized an agricultural operation within the planning area. Trespass onto private in holdings is actively encouraged by BLM in both its current operations of the Dunes (i.e. maps of open areas) and in the proposed Draft RAMP/EIS. This is unlawful and renders the plan suspect.

6. Visual Resources

The Algodones Dunes is a National Natural Landmark, based on the remarkable sand dune formation that it is. This designation is not identified in the Draft RAMP/EIS. Allowing degradation of the resources by ORV activities compromises the essence of the Landmark designation. The Draft RAMP/EIS fails to analyze how the non-ORV recreationists specifically view the landscape. It also fails to analyze the generally disruptive changes from ORV activities including minimization and elimination of vegetation, increased dust and increased crowds.

7. Water resources

The Draft RAMP/EIS completely fails to actually evaluate the impact on water resources from the different alternatives. Instead it provides a vague insight: "Differences in impacts to ground water resources would potentially vary by alternative as the amount of surface disturbance varies. Alternatives providing more acreage for OHV recreation, camping, construction activities, as well as renewable energy and geothermal development activities would result in greater adverse impacts" (at 4-13). This analysis is uninformative on the actual impacts to water resources.

In addition, no analysis is provided on the potential impacts to wildlife from people hanging around guzzlers or ephemeral ponds that occur primarily on the east side of the dunes in the microphyll woodlands. Human presence can negatively affect wildlife visitation to guzzlers and water sources.

8. Cultural resources

The Draft RAMP/EIS is wholly inadequate in its analysis of the impacts to cultural resources from the different alternatives. The document states that “There should be little difference between alternatives in terms of direct impacts to cultural resources” – an unsupported statement. However, the document goes on to say “There may be some differences, however, with regard to indirect loss or degradation because alternatives vary in the sizes of protection-oriented management decisions” (4-43). The Draft RAMP/EIS simply fails to actually analyze the impacts to the cultural resources from the alternatives, much less provide any avoidance, minimization or mitigation scenarios.

9. Traffic and transportation

No analysis was provided on hydrocarbon emissions per mile based on the variety of vehicles that use the dunes (i.e. including motorcycles and quads) and traffic to and from the planning area especially during times of the highest use. Our scoping comments of May 30, 2008 requested that an alternative be included that would place restrictions on vehicles built prior to 1997 and not upgraded, because the pollution coming from these vehicles far exceeds newer models. However this completely reasonable and viable alternative was not included or analyzed.

Another unanalyzed alternative that we suggested in our scoping comments is an alternative that includes traffic control methods that enhance safety on the dunes and adjacent areas, to reduce the number of tragic and avoidable deaths and injuries.

10. Noise

Draft RAMP/EIS acknowledges that peer-reviewed studies have shown negative impacts of prolonged noise from ORVs on desert iguanas and desert kangaroo rats (at 4-31). Additionally, it states that “Wildlife exposure to OHV noise is localized and only at high levels during the six major holiday weekends during the recreation season” (at 4-31), which is a highly unlikely claim. Nowhere in the Draft RAMP/EIS does BLM attempt to quantify or comprehensively analyze the *differential* impacts of noise in each of its plan alternatives. There are no provisions for studies on the impacts of ORV noise on wildlife in the planning area. Nowhere does BLM provide for monitoring, scientific studies, or even adaptive management accounting for the potential effects of ORV noise on biological resources. Considering BLM’s mandate to protect listed and sensitive species from known threats, and its acknowledgement of previous studies showing that high ORV noise levels negatively affect wildlife, this portion of its NEPA analysis is seriously flawed.

In addition, the Draft RAMP/EIS assumes a noise level for a single ORV of 92 dBA at 50 feet (uncited assumption) and also assumes that “the duration is likely to be quite short” (at 4-31). Since ORV use levels in the planning area are the highest in the state and ORVs are often driven in groups rather than individually, this is probably a low estimate of actual sound levels. The BLM’s failure to establish baseline noise levels in the planning area, and its assumption that they are merely equivalent to conditions elsewhere, renders incomplete and inadequate its NEPA analysis of the environmental effects of noise at the Dunes.

Based on the massive numbers of ORVs that occur on popular weekends, no cumulative noise impacts on wildlife is analyzed in the Draft RAMP/EIS. The impact that noise has on the wilderness experience for non-motorized recreationists is also not identified or analyzed.

11. Hazardous Material

The Draft RAMP/EIS fails to include an analysis of the hazardous material spills that occur on the dunes from ORV activities. These toxic substances can detrimentally affect the numerous plants and/or animals that live on the dunes. It also fails to identify or include analysis of the illegal dumping of human waste and chemicals from ORV related camping activities.

12. Geology and soils

The Draft RAMP/EIS fails to look at all the impacts on the geology of soils generated by ORVs in the planning area. Studies show that sand compaction by vehicles and human trampling increases soil bulk density, penetration resistance, and thermal capacity (Little and More 1974). Luckenbach and Bury (1993) suggested that comparable soil effects are expected through ORV use in the planning area and that more studies are required. BLM never conducted studies to compare hydrology and compaction between motorized and non-motorized areas, and these studies are not proposed in any of the alternatives. These studies would help to assess the overall condition of habitat for sensitive plants and animals.

13. Cumulative effects

The CEQ regulations implementing NEPA clearly direct federal agencies to consider the direct, indirect, and *cumulative* effects of their actions on environmental resources. 40 C.F.R. §1508.8. The regulations define "cumulative effects" as:

the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. §1508.7.

The cursory discussion of cumulative effects in the Draft RAMP/EIS fails to meet this standard and is completely inadequate to assess such impacts. The analysis must consider the incremental impacts of the action in conjunction with the impacts of other past, present, and future actions. This requirement means that the agency must look beyond the life of the proposed action. Moreover, the past, present, and future actions that must be evaluated include all actions -- whether federal, non-federal, or private. The analysis of cumulative impacts should also focus on each affected resource, ecosystem, and human community, and address the sustainability of each.

14. Mitigations

The Draft RAMP/EIS sets forth weak or non-existent mitigation measures that would need to be implemented in order to maintain environmental integrity under the Clean Air Act, the Endangered Species Act, and other federal environmental laws. NEPA requires that an EIS discuss mitigation measures and the purpose of the mitigation discussion is to evaluate whether anticipated environmental impacts can be avoided. NEPA also requires this section of the EIS to “[i]nclude appropriate mitigation measures not already included in the proposed action or alternatives” 40 C.F.R. § 1502.14. Mitigation measures also comprise part of the scientific and analytical basis for the comparative analysis required under NEPA. 40 C.F.R. §1502.16 (h).

Mitigation measures must be set forth with “sufficient detail to ensure that environmental consequences have been fairly evaluated”. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351-52 (1989). As the Ninth Circuit recently noted: “[a] mitigation discussion without at least some evaluation of effectiveness is useless in making that determination.” *South Fork Band Council of Western Shoshone v. DOI*, 588 F.3d 718, 727 (9th Cir. 2009) (emphasis in original). The BLM’s DEIS fails to include mitigation measures for many impacts, fails to address mitigation measures not included in the proposed action or alternatives, and fails to include sufficient detail and information for the few measures it does discuss. Therefore, it is not in compliance with NEPA.

c. THE RAMP FAILS TO COMPLY WITH THE FLPMA AND THE CALIFORNIA DESERT CONSERVATION AREA PLAN (1980)

The Federal Land Policy and Management Act (“FLPMA”), 43 U.S.C. §§ 1701-85, is our basic national charter for protection and management of public lands. *See Center for Biological Diversity v. Bureau of Land Management*, 422 F.Supp.2d 1115, 1122, 1166-67 (N.D. Cal. 2006). FLPMA also requires that BLM prepare and maintain a current inventory of all public lands and their resources. 43 U.S.C. §1711(a), and that this inventory forms the basis of the land use planning process. 43 U.S.C. §1701(a)(2).

All BLM policies, procedures and management actions must be consistent with the Federal Land Policy and Management Act of 1976 (P.L. 94-579, 90 Stat. 2743, 43 U.S.C. 1701 et seq.) (FLPMA) and with other laws governing the use of public lands. The BLM must address the need to “observe the principles of multiple use and sustained yield.” § 202 [43 U.S.C. 1712 (c)1], and it must “give priority to the designation and protection of areas of critical environmental concern (3) and “weigh [the] long-term benefits to the public against short-term

benefits” (7). In addition § 102 [43 U.S.C. 1711 (a)(8)] mandates “public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that where appropriate, will preserve and protect certain public lands in their natural conditions; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use.”

According to FLPMA, “areas of critical environmental concern” should be given priority. According to § 1702 (a), these are:

Areas within public lands where special management attention is required...to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

Therefore, reasonable alternatives must include protection of sensitive species as a higher priority than off-road vehicle recreation.

FLPMA was enacted in part to ensure such protections, and the CDCA was created expressly to protect the fragile ecosystem in this area. *See* 16 U.S.C. § 1536(a)(1), (2); 43 U.S.C. §§ 1701(a)(8), 1781(a)(3); 1732(b). Specifically, the CDCA puts a high priority on wildlife and plants found in the southern California desert as noted in § 1601 [43 U.S.C. 1781] (a) 3:

The California desert environment and its resources, including certain rare and endangered species of wildlife, plants, and fishes and numerous archeological and historic sites, are seriously threatened by air pollution, inadequate Federal management authority, and pressures of increased use, particularly recreational use, which are certain to intensify because of the rapidly growing population...

Moreover, protecting State listed and BLM sensitive species from decline on public lands is *required* under the terms of the CDCA Plan -- “All state and federally listed species will be fully protected”; “Manage those wildlife species officially designated as sensitive by the BLM for California and their habitats so that the potential for Federal or State listing is minimized”. The CDCA Plan also requires that BLM consider the impacts on the habitats of sensitive species “so that impacts are avoided, mitigated, or compensated.”

The code states that recreation should be multi-use; however, it specifies that off-road vehicles be used for recreation only “where appropriate.” § 601 [43 U.S.C. 1781] (a) 4. FLPMA also prohibits the “unnecessary or undue degradation” of BLM administered lands. 43 U.S.C. 1732 (b). Current ORV use at the Algodones Dunes is completely inconsistent with the governing regulations for off-road vehicle use at 43 C.F.R. Part 8340. The alternatives proposed in the Draft RAMP/EIS are also completely inconsistent with the governing regulations, as most of the alternatives allow MORE ORV activity than is currently permitted.

d. THE RAMP FAILS TO COMPLY WITH THE ESA

The Algodones Dunes are home to several threatened and endangered species, including the Peirson's milkvetch (*Astragalus magdalenae* var. *peirsonii*) and the desert tortoise (*Gopherus agassizii*), both of which are federally listed threatened species. In addition, the flat-tailed horned lizard (*Phrynosoma mcallii*) is proposed for Endangered Species Act protection and also inhabits the Dunes (and additional areas adjacent to the Algodones dunes). These species need to be avoided to the greatest extent possible, and where that is not possible, impacts need to be minimized and mitigated. Unfortunately, the proposed alternatives do not achieve this goal (as discussed above).

Section 7 of the ESA explicitly states that all Federal agencies shall “insure that any action authorized, funded or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.” 16 U.S.C. § 1536 (a)(2). The Act defines “jeopardize” as taking any action that would appreciably reduce the likelihood of both the survival and *recovery* of the species [emphasis added]. Any activities dependent on federal discretion are subject to this requirement. Effects of the action include direct and indirect effects as well as the effects of other activities that are interrelated or interdependent with the action. 50 C.F.R. § 402.02. In order to satisfy this requirement, all Federal agencies must consult with the USFWS when any activity they authorize, fund or carry out could affect listed species 16 U.S.C. § 1536 (a)(2). BLM must include alternatives that protect all areas that contain threatened and endangered species. In fact the preferred alternative should include this scenario because section 9 of the ESA and its implementing regulations prohibit any person, including any federal agency, from “taking” a threatened or endangered species. 16 U.S.C § 1538 (a)(1); 50 C.F.R. § 227.21. Taking is defined broadly under the ESA to include harming, harassing or killing a protected species either directly or by degrading its habitat sufficiently to significantly impair essential behavioral patterns. 16 U.S.C § 1532 (19); 50 C.F.R. § 173. A federal agency may take listed species incidentally, in an otherwise lawful activity only after obtaining an incidental take statement from USFWS at the conclusion of a formal consultation under Section 7. 16 U.S.C. § 1536 (b)(4). USFWS must specify in the incidental take statement “those reasonable and prudent measures...necessary or appropriate to minimize” the impact of the incidental taking and mandatory terms and conditions to implement those measures. *Id.* The point here is that the Draft RAMP/EIS fails provide enough current scientific data to adequately assess the extent of “take” for each alternative and for each species. Additionally the Draft RAMP/EIS fails to identify adequate mitigation for the impacts will occur to the species. Mitigation measures must reflect reality of the BLM's resources.

e. THE RAMP MUST COMPLY WITH THE CLEAN AIR ACT

Air quality impacts are particularly important to the health of humans and other biota. BLM must analyze, among other things, whether the alternatives will meet both federal and state air quality standards. *See* 40 C.F.R. §1508.27 (10) (requiring that the preparing agency evaluate “[w]hether the action threatens a violation of Federal, State, or local law or requirements

imposed for the protection of the environment"). BLM fails to sufficiently analyze whether its alternatives will comply with federal and state laws related to air quality.

The Clean Air Act and its implementing regulations [40 C.F.R Part 93] include the following provisions:

No department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plans.

As the agency is well aware, Imperial County is in "serious" non-attainment of federal Clean Air Act standards for coarse particulate matter (PM10) emissions. The Clean Air Act requires areas in non-attainment to come into attainment and develop plans to do so. The BLM cannot lawfully to approve a plan and make a consistency determination where the chosen alternative keep this area in non-attainment for PM10 and inhibit the air basin achieving the CAA standards. *Center for Biological Diversity v. BLM*, 2009 U.S. Dist. LEXIS 90016 (N.D. Cal. September 28, 2009) (finding BLM's conclusions regarding impacts to air quality insufficient where they failed to take into account impacts from adjacent open areas).

Much of the PM10 emissions are caused by ORV activities in Imperial County (75 FR 39366). Indeed the EPA has ruled that the State Implementation Plan (SIP) for Imperial County, which goes into effect today, is deficient in addressing air quality pollution in several areas that are directly related to this Draft RAMP/EIS. The EPA found that the SIP is deficient in its ORV activities in Open Areas, including the Algodones Dunes and other public lands, and unpaved non-farm roads and traffic areas (Ibid), which requires additional efforts to *reduce* pollutants from these sources based on existing conditions. Of the proposed alternatives, only Alternative 3 achieves modeled reductions in PM10 (and other pollutants) needed to move this area towards compliance with the CAA standards. Additional alternatives need to be included, including those we submitted in our scoping comments of May 20, 2008, which also provide reductions in PM10.

BLM should have included a range of alternative that would reduce PM10 and dust by limiting areas where natural surfaces and vegetation are destroyed by ORVs—Alternative 3 is insufficient to show that BLM has carefully considered ways to reduce PM10 and other air pollutants in this EIS. BLM should also have included at least one alternative that would limit the number of ORVs on high wind days; impose lower speed limits on the dunes and surrounding dirt roads (speed is also a factor in PM10 introduction into the air); restrict the numbers of ORVs using the dunes on moderate and high use days. In addition, BLM should have considered additional areas for closure and restoration of native soils in order to reduce PM10 and other air pollutants.

BLM is required to analyze potential changes in air quality at the Algodones Dunes in order to properly consider the environmental impacts of any proposed management plan. Identifying and quantifying the PM10 and other emissions from the activities at the Algodones dunes is also critical in developing a plan to reduce emissions and move towards achieving CAA

standards. Yet BLM still does not have one air monitoring station within the planning area, so it uses data from other remote stations. While BLM acknowledges that adverse air quality conditions exist within the planning area, it cannot possibly discuss the “true” environmental impacts of air quality within the planning area. This is because it basically lacks any monitoring stations. Given the importance of air quality monitoring and the extent of the air quality problems in this area, it is frankly shocking that BLM has not yet undertaken adequate air quality monitoring to date.

ORV activities cause dust including air-borne particles in both the PM₁₀ and PM_{2.5} range. They add to the particulate matter in the air basin, which already exceeds state and federal standards for both 24-hour periods and annual standards. Ozone is also a by-product of ORVs and the production and health risk. The Draft RAMP/EIS modeled air emissions from recreation vehicle sources (at 4.5, Table 4-3) presumably within the planning area only, and provides a baseline based on Alternative 2. Modeling indicates that all alternatives, except Alternative 3 will increase PM₁₀ (and other pollutants) from the existing conditions. Based on modeling assumptions that are not even comprehensive (see below), every alternative except alternative 3 would increase the amount of air pollutants, especially the PM₁₀ by tens of thousands of tons per year. In fact as the Draft RAMP/DEIS notes “Alternatives 1 and 4 through 8 exceed the *de minimis* thresholds” (at 4-6). Clearly none of these alternatives can be chosen. The BLM cannot authorize activities that continue or increase the degradation of the air quality in these air basins.

The modeling was based on estimates of ATVs and motorcycles from air basins that do not allow ORVs on sand dunes. Modeling for 4-wheel drive trucks and sand rails were modeled from data on unpaved roads, not sand dunes. Additionally, soil types are not homogenous throughout the planning area, and different soil types produce different amounts of PM₁₀ emissions, which are also dependent upon speed and vehicle type (Goossens and Buck 2009). None of these factors are included in the simplistic modeling effort of the Draft RAMP/EIS. The modeling also fails to evaluate other types of vehicles that use the dunes, as well as other activities that create PM₁₀ (and other pollutants) including campfires, generators, and travel to and from the Algodones dunes just to name a few. All of these activities cause increases in PM₁₀ emissions (and other pollutants) in an already highly compromised air basin. The Draft RAMP/EIS also fails to include calculations for air quality impacts for emissions from vehicles driving to and from the Algodones dunes. This air pollution is clearly a related action to the RAMP and adds additional air pollutants to the already impaired air basin.

The BLM also fails to take into account the benefits of keeping natural soil conditions and allowing additional areas to revegetate and establish more stable soil conditions. As Belnap et al. (2009) showed and is well known, in wind borne dust from intact soils is significantly less than from disturbed soils. ORV use introduces significant dust into the air even in low wind conditions and coupled with moderate or high wind this increases significantly. “So. Calif. ORV users created up to 5.9 billion pounds dust/year in 2006, and use is still increasing (9.8 million user days, 20 miles/day, 27 mph)” (Belnap et al. 2009).

Additionally, temperature inversions commonly occur in the planning area between November and June, which coincides with maximum-use periods in the planning area (at 3-2). With the extremely high number of visitors and vehicles coming to the area at those times, the fact that two dangerous pollutants continually exceed the air pollution standards there is an area of concern that is not addressed in the Draft RAMP/EIS.

Because one of the primary contributors of air pollutants (PM10) within lands administered by the BLM in Imperial County is ORV recreation (at 3-11), adequate monitoring equipment needs to be installed on and near the Dunes both in areas where the production of these pollutants occurs and where particulates and other pollutants drift or are carried by winds, so that the effects of air pollutants created on site can be quantitatively evaluated both on and off site. It is the BLM obligation to monitor the effects of their permitted activities in order to achieve one of the plan's goals "Maintain or improve air quality as established by the NAAQS and California Ambient Air Quality Standards (CAAQS)" (at 2-7).

The Draft RAMP/EIS fails to provide the 'Fugitive Dust Control Plan to identify sources of PM10 within lands administered by BLM and identify dust control measures that can be implemented to help minimize or eliminate emissions (BLM 2006a)" or the "revised plan [that] will be developed by BLM and submitted to Imperial County in Fall 2009." (at 3-11). However the 2009 plan is not cited in the references or presented in the Draft RAMP/EIS. A Dust Control Plan (BLM 2010), which was provided to the EPA regarding the SIP, is not included in the Draft RAMP/EIS and is wholly inadequate to address needed reductions in PM10 pollution at the dunes and the deficiencies noted in the SIP.

Impacts to air quality from activities in adjacent areas also require further identification and analysis as well as cumulative impacts to air quality from other activities in these basins. *See Center for Biological Diversity v. BLM*, 2009 U.S. Dist. LEXIS 90016 (N.D. Cal. September 28, 2009) (finding BLM's conclusions regarding impacts to air quality insufficient where they failed to take into account impacts from adjacent open areas and also finding cumulative impacts analysis insufficient).

f. THE RAMP FAILS TO DISCUSS AND THOROUGHLY ANALYZE ENVIRONMENTAL IMPACTS

On the basis of the best available science, the environmental impacts to each of the affected areas is not thoroughly analyzed. The EIS fails to look at ways to avoid, minimize and mitigate those impacts with full implementable, realistic mitigation measures. Monitoring of resources is not in itself mitigation, and must be implemented to ensure that all mitigation is effective and resources are protected and not in decline. Monitoring should be tied to triggers for specific actions in the event impacts to resources are greater than anticipated. The Draft RAMP/EIS mostly fails to analyze the impacts and therefore fails to identify adequate mitigation.

g. THE RAMP FAILS TO COMPLY WITH ALL EXECUTIVE ORDERS

In response to the growing use of ORVs and attendant environmental damage, President Nixon and Carter respectively issued Executive Orders which mandated BLM to only allow ORV use on public lands if certain conditions were met. 37 Fed. Reg. 2877 (1972); 42 Fed. Reg. 26959 (1978). These Orders are binding on BLM and enforceable as law. *See Conservation Law Foundation v. Clark*, 590 F.Supp. 1467, 1477 (D. Mass. 1984) (holding that Executive Orders 11,644 and 11,989 are both “invested with the status of law” and enforceable), *aff’d*, *Conservation Law Found. v. Secretary of the Interior*, 864 F. Supp. 954 (1st Cir. 1989).

Executive Order 11,644 mandates that the Secretary of the Interior issue regulations which require the designation of specific areas and trails on public lands to which ORV use will be limited. After an initial set of regulations were overturned in *National Wildlife Federation v. Morton* 393, F.Supp. 1286, 1292 (D.D.C. 1975), the BLM re-issued the ORV regulations in force today. 43 C.F.R. §§ 8340-42. Following the requirements of the Executive Orders, the regulations require that BLM protect the environment in affected areas. These requirements, often referred to as the “minimization criteria,” are as follow:

- “minimize damage to soil, watershed, vegetation, air, or other resources of the public lands and to prevent impairment of wilderness suitability” (43 C.F.R. § 8342.1(a));
- “minimize harassment of wildlife or significant disruption of wildlife habitats” (43 C.F.R. § 8342.1(b));
- “minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors” (43 C.F.R. § 8342.1(c)); and
- prohibit trails in “officially designated wilderness areas or primitive areas” (43 C.F.R. § 8342.1(d)).

As one court recently found:

“Minimize” as it is used in the regulation does not refer to the number of routes, nor their overall mileage. It refers to the *effects* of route designations, *i.e.*, the BLM is required to place routes specifically to minimize “damage” to public resources, “harassment” and “disruption” of wildlife and its habitat, and “minimize” conflicts of uses. 43 C.F.R. § 8342.1(a)-(c).

Center for Biological Diversity v. BLM, 2009 U.S. Dist. LEXIS 90016 (N.D. Cal. September 28, 2009) (finding that the WEMO Plan was deficient under the Federal Land Policy Management Act (“FLPMA”) in failing to address the minimization requirements for route designations, and that the FEIS unlawfully failed to analyze specific impacts from the WEMO Plan on soils, cultural resources, “Unusual plant assemblages” (UPAs),

water and riparian resources, and the Mojave fringe-toed lizard, as required by NEPA). The EIS fails to consider ways to minimize impacts both from authorized use and from unauthorized use that is likely to occur in these areas.

The EIS fails to present ways to reduce, avoid, and minimize greenhouse gas emissions and offset those that cannot avoided or minimized.

h. THE DRAFT RAMP/EIS FAILS TO INCLUDE REASONABLE ALTERNATIVES.

As discussed above, our scoping comments (May 30, 2008) suggested several reasonable alternatives that were not included in the Draft RAMP/EIR. The supplemental RAMP/EIS should include these alternatives and analyze their effects.

i. RENEWABLE ENERGY IS INAPPROPRIATE IN PLANNING AREA

The development of renewable energy is a critical component of efforts to reduce greenhouse gas emissions, avoid the worst consequences of global warming, and to assist California in meeting emission reductions set by AB 32 and Executive Orders S-03-05 and S-21-09. The Center strongly supports the development of renewable energy production, and the generation of electricity from solar and wind power. However, like any project, renewable energy projects should be thoughtfully planned to minimize impacts to the environment. In particular, renewable energy projects should avoid impacts to sensitive species and habitats, and should be sited in proximity to the areas of electricity end-use in order to reduce the need for extensive new transmission corridors and the efficiency loss associated with extended energy transmission. Only by maintaining the highest environmental standards with regard to local impacts, and effects on species and habitat, can renewable energy production be truly sustainable.

Even the most conservative alternative (alternative 8) proposes to site renewable energy within habitat for the imperiled flat-tailed horned lizard and the desert tortoise. These impacts are not analyzed in the Draft RAMP/EIS. Additionally, the location of the proposed areas are primarily downwind of the dunes, and the dunes will eventually encroach upon those areas, making them unsuitable for long-term industrial development. Coupled with the ORV use in the planning area, we fail to see how single-use renewable energy is compatible with uses already occurring in the planning area.

j. CONCLUSION

For the reasons explained above, the Draft RAMP/EIS as written fails to comply with the National Environmental Policy Act, the Federal Land Policy and Management Act, the Endangered Species Act, the Sikes Act, the California Endangered Species Act, the National Historic Preservation Act, the National Natural Landmarks Program, the Clean Air Act, Presidential Executive Order 13007, and Presidential Executive Orders 12898, 11644, and 11989, Secretary Executive Orders 3226 and 3289 and applicable

Bureau of Land Management policy, handbook codes, and regulations.

BLM must therefore prepare a supplemental or amended EIS that fully addresses the impacts of the proposed Management Plan on Peirson's milk-vetch, the desert tortoise, and other sensitive species at the Algodones Dunes. A majority of the alternatives, including the proposed preferred alternative would substantially increase ORV use and impacts in the planning area.

Thank you for the opportunity to provide comments on the Draft RAMP/EIS. We look forward to reviewing the supplemental EIS. Please feel free to contact me with any questions at the contact information below.

Sincerely,



Ileene Anderson
Biologist/Public Lands Desert Director
Center for Biological Diversity
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cc via email:

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Kevin Hunting, CDFG, KHunting@dfg.ca.gov
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References (Provided on CD)

- Ballesteros-Barrera, C., E. Martinez-Meyer and H. Gadsden. 2007. Effects of Land-Cover Transformation and Climate Change on the Distribution of Two Microendemic Lizards, Genus *Uma*, of Northern Mexico. *Journal of Herpetology* 41(4): 733-740.
- Barrows, C. W. and M.F. Allen
2010. Patterns of occurrence of reptiles across a sand dune landscape. *Journal of Arid Environments* 74: 186-192.

2009. Conserving species in fragmented habitats: Population dynamics of the flat-tailed horned lizard, *Phrynosoma mcallii*. *Southwestern Naturalist* 54(3): 307-316
- Beauchamp, B. B. Wone, S. Bros and M. Kutilek 1998. Habitat use of the flat-tailed horned lizard (*Phrynosoma mcallii*) in a disturbed environment. *Journal of Herpetology* 32(2): 210-216.
- Belnap, J. R. Reynolds, M. Reheis, G. Okin and T. Painter 2009. Dust in low elevation lands: what creates it and what can we do about it? Presentation given at Colorado River Conservation Seminar. September 18, 2009.
- General Accounting Office (GAO) 2007. Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources. GAO-07-863. Pgs 184.
- Goossens, D., and B. Buck 2009. Dust emission by off-road driving: Experiments on 17 arid soil types, Nevada, USA, Geomorphology, doi:10.1016/j.geomorph.2008.12.001
- Grant, T.J. and P.F. Doherty, Jr. 2007. Monitoring of the flat-tailed horned lizard with methods incorporating detection probability. *Journal of Wildlife Management* 71(4): 1050-1056.
- Groom, J.D., L.B. McKinney, L.C. Ball and C.S. Winchell 2007. Quantifying off-highway vehicle impacts on density and survival of a threatened dune-endemic plant. *Biological Conservation* 135: 119-134.
- Kelly, A.E. and M.L. Goulden 2008. Rapid shifts in plant distribution with recent climate change. August 19, 2008. *PNAS* 105(33): 11823-11826.
- Liddle, M. J. and K. G. Moore 1974. The Microclimate of Sand Dune Tracks: The Relative Contribution of Vegetation Removal and Soil Compression. *Journal of Applied Ecology* 11(3): 1057-1068
- Luckenbach, R.A. and R.B. Bury 1983. Effects of off-road vehicles on the biota of the Algodones dunes, Imperial County, California. *Journal of Applied Ecology* 20: 265-286.
- Ouren, D.S., C. Haas, C.P. Melcher, S.C. Stewart, P.D. Ponds, N.R. Sexton, L. Burris, T. Fancher and Z. H. Bowen 2007, Environmental effects of off-highway vehicles on Bureau of

Land Management lands: A literature synthesis, annotated bibliographies, extensive bibliographies, and internet resources: U.S. Geological Survey, Open-File Report 2007-1353, 225 p.

Pough, F.H. 1970. The Burrowing Ecology of the Sand Lizard, *Uma notata*. Copeia 1:145-157

Pyke, C.R. 2004. Habitat loss confounds climate change impacts. Frontiers in Ecology and Environment 2(4): 178–182

J.S. Wilson, J.S., O.J. Messinger and T. Griswold 2009. Variation between bee communities on a sand dune complex in the Great Basin Desert, North America: Implications for sand dune conservation. Journal of Arid Environments 73: 666-671.

Wone, B. and B. Beauchamp 2003. Movement, home range, and activity patterns of the horned lizard *Phrynosoma mcallii*. Journal of Herpetology 37(4): 679-686.

OHMVR Division.txt

----- Forwarded by Erin Dreyfuss/CASO/CA/BLM/DOI on 08/10/2010 07:31 AM

"Parra,
Josephine"
<JPARRA@parks.ca.
gov>

08/09/2010 06:41
PM

<erin_dreyfuss@blm.gov>,
<caisdramp@ca.blm.gov>

To

cc

Subject
Letter of OHMVR Division's comments
on the draft RAMP

(Embedded image moved to file: pic16360.jpg)

Dear Ms.

Attached please find the OHMVR division's comments on the draft RAMP

Kindly,
Josephine Parra

Josephine Parra
Office Assistant
Department of Parks and Recreation
Off-Highway Motor Vehicle Recreation Division
jparra@parks.ca.gov
916-324-6595 Direct Line
916-324-1610 Fax

(See attached file: OHMVR DRAMP IMPERIAL.pdf)



August 9, 2010

Ms. Erin Dreyfuss
RAMP Team Lead
Bureau of Land Management
El Centro Field Office
1661 S. 4th Street
El Centro, California 92243

RE: Comments on the Imperial Sand Dunes Draft Recreation Area Management Plan and Draft Environmental Impact Statement

Dear Ms. Dreyfuss,

The California Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division (Division) is pleased to provide the following comments on the Bureau of Land Management (BLM), El Centro Field Office, Draft Recreation Area Management Plan and Draft Environmental Impact Statement (Draft RAMP/EIS) for the management of BLM-administered lands within the Imperial Sand Dunes Special Recreation Management Area (ISDSRMA).

The Division submits these comments pursuant to its duty to ensure that quality OHV recreational opportunities remain available while also providing for the protection of natural and cultural resources, and to assist the BLM in its commitment to manage, protect, and improve public lands in a manner to serve the public. We recognize the difficulty of addressing multiple interest groups while maintaining focus on core mission and values of the agency, and appreciate the efforts undertaken by the BLM to provide a range of alternatives to the issues that exist in the ISDSRMA.

Peirson's Milk-vetch and Critical Habitat Closures

- The Division recognizes the importance of protecting the Peirson's milk-vetch (PMV) given its listing on the Endangered Species list. However, because a recovery plan has not yet been adopted by the U.S. Fish and Wildlife Service (USFWS), it is extremely problematic to effectively plan for how to manage this species in the ISDRA. The Draft RAMP lacks a thoughtful discussion and justification in each of the proposed alternatives. Without a recovery plan, the Division is concerned that proposed closures of land outside existing, designated critical habitat seems premature.

- The Draft RAMP lacks solid documentation and support for closure of areas outside the designated critical habitat particularly since BLM has not offered any explanation as to why PMV appears to do well in areas open to OHV recreation. We recommend the plan call for more thorough studies of PMV population trends be completed in order to evaluate the effects of rainfall and vehicular disturbance on the population, and that subsequent management actions be based on information developed in such studies.
- The preferred Alternative 8 calls for closure of all areas designated as critical habitat for PMV. While this approach adheres to critical habitat as determined by USFWS, managing this alternative may prove to be problematic due to the irregular, and in some instances, narrow boundary lines. Marking such an area on the ground, especially the narrow sections, would be a difficult task and would be confusing to both recreationist and law enforcement. The Division supports the boundary proposed in Alternative 7, and the squaring-off the boundaries in the critical habitat, and suggests the consideration of the narrowing of the proposed southeastern border. This is possible given that the USFWS does not require all critical habitat be protected by closures, but still provides significant protections to the bulk of the designated critical habitat in a way which can be readily enforced. This proposed boundary would slightly reduce the acres of OHV access in this area compared to Alternative 8, and would result in a more realistic area for BLM to manage with less confusing boundaries for OHV recreationists.
- In Alternatives 7 and 8, the prohibition of motorized use within PMV critical habitat would result in a lack of pass-through corridors through the southern critical habitat for several miles, and from the Dune Buggy Flats campground area. This lack of corridors creates barriers to timely response by law enforcement and emergency medical responders to emergency situations. This would also be confusing to OHV recreationists, and could lead to trespass into closed areas by visitors. With the correct signage and education, two or more vehicle connecting corridors through the southern critical habitat area could be established and would allow vehicles to travel between the East and West open areas. The designated corridors would become the preferred routes, sharply reducing potential unauthorized incursions into the closed critical habitat. Without the identification of connecting corridors, OHVs could potentially travel through the critical habitat areas at many different locations, affecting PMV recovery efforts.

Campground Restrictions and Closures

- The Division has concerns with the camping closure in the Buttercup and Mammoth Wash areas, and the Dune Buggy Flats campground provided for in Alternative 8 when the 1.82 inch rainfall threshold established for PMV is met. The RAMP does not

address or explain the significance of the 1.82 inch rain threshold in terms of PMV reproductive success. If BLM is going to make a determination regarding closure based on a certain amount of rainfall, then a long-term weather station or a remote area weather station in the Dune Buggy Flats campground area must be established to accurately capture the precipitation in the area. Further, the closure to the Dune Buggy Flats campground does not appear to be within the PMV critical habitat and it is not clear how this closure would affect the habitat of the PMV and/or promote a PMV population increase. The proposed closure of the campground would occur from January 15th through June 30. This time period would include the major holiday weekends of Martin Luther King Day, President's Day, and Easter, making the camping closures a hardship for the camping and OHV enthusiasts, while concentrating OHV recreationists into smaller areas. The campground closures would most likely encourage campers to relocate to the next closest campgrounds of Ogilby and Dunes Vista and potentially in other non-approved campsites. Since PMV does well in areas open to OHV use, the Division supports keeping the existing campsites open and addressing the issue with increased education and enforcement versus closing these very popular areas for camping.

Microphyll Woodlands

- While the Division understands the importance of vegetation that provides landscape habitat connectivity and physical stability to support ground-dwelling species, the reasoning for the microphyll woodland area closures in the various alternatives is not clear. Additional documentation, scientific study, and analysis is necessary. The microphyll woodland area covers approximately 21,992 acres of the entire planning area. The proposal to close camping on the east side in the microphyll woodland habitat is a significant change to this historic activity. Damage to and impacts on the habitat and affected species that reside in this habitat must be conclusive. There is no scientific explanation as to why camping in the microphyll woodlands is acceptable in all alternatives except Alternative 8. Lacking further justification for closure, the Division supports keeping historic camping opportunities open along the eastern border of the ISDRA.

Air Quality

- Issues relative to obtaining a level of attainable air quality in the Planning Area are confusing. For example, reference is made to Rule 800 in which the Imperial County Air Pollution Control District considers recreational use of public lands exempt from their regulations for fine particulate matter. However, a later discussion indicates if one of these alternatives is selected, a Conformity Determination must be made as to whether the selected alternative conforms to the ICAPCD's SIP for ozone and PM₁₀. It is not clear what specific action would result if the alternative does not conform.

Ms. Dreyfuss
August 9, 2010
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- Much of the air quality data appear to be outdated and may no longer be appropriate and/or representative to use in any analysis.
- It does not appear data are available that adequately identify OHV recreation as the major source of air pollutants since the air quality monitoring stations are not located within the Planning Area. The nearest air quality monitoring station is located approximately 20 miles southeast at Calexico East.
- Data relative to each vehicle type do not appear to be addressed, such as the difference in emissions between a 2-stroke versus a 4-stroke vehicle and whether there is an increase in the use of the 4-stroke vehicles or other vehicles with lower emissions in the Planning Area.
- The draft RAMP/EIS uses the URBEMIS model to determine PM10 fugitive dust emissions from "4-wheel drive trucks and sand rails" operating at ISDSRMA. This model is inappropriately applied to the off-highway vehicle recreation at ISDSRMA because it is based on travel over unpaved roads with an unspecified surface (other than "unpaved"). Recreation using "4-wheel drive trucks and sand rails" at ISDSRMA is by and large not on unpaved roads, but on the dune sand. The Division has concerns that the modeled fugitive dust emissions are over-estimated.

Summary

As noted on the first page of the Draft RAMP, and on page 2-2 under Alternative 8, *"The proposed decisions under this alternative could be identical to those under one of the other alternatives presented or could be a combination of the features from several of the alternatives"*. The Division, in general, agrees with many of the components of the preferred Alternative 8 in that it appears to strike a balance between providing OHV recreation opportunities and resource protection; however, there are also a number of components in Alternative 7 that provide a practical management approach to meeting the needs of the recreationists. The Division proposes BLM consider mixing components of Alternatives 7 and 8 which would provide the best overall approach to managing ISDRA.

Thank you for the opportunity for the Division to comment on the Draft RAMP/EIS for the ISDSRMA. The Division is troubled by potential ramifications of several alternatives proposed in the RAMP and, in particular, their adverse impacts to camping and OHV recreation. As always, the Division is prepared to work closely with the BLM in developing modified alternatives which will assist BLM in fulfilling its mission of stewardship of our public lands.

Sincerely,



Daphne Greene
Deputy Director
OHMVR Division

From: [ANDERSON, SCOTT F \(ATTIS\)](#)
To: caisdrmp@ca.blm.gov
Subject: My RAMP Comments - Scott Anderson
Date: 08/04/2010 12:56 PM

> RAMP Team Lead
> Attention: Erin Dreyfuss
> 1661 South 4th Street
> El Centro, CA 92243

> Subject: Comments on 2010 Draft Recreation Area Management Plan
> (DRAMP)

> Dear Ms. Dreyfuss:

> My name is Scott Anderson. My family has enjoyed visiting the
> ISDRA throughout the winter months for the last 26 years. During
> recent years I have been forced to become active in voicing my opinion
> on the management of our Dunes. I have participated along side my
> family and friends in various litter removal campaigns, new visitor
> education via various web forums, promoting and enlisting our youth in
> the ATV certification and training classes provided by the American
> Desert Foundation - as well as the simple act of self policing our own
> campsites during trips to Glamis. I have always taught my family to
> respect and follow the laws at the ISDRA and will continue so in hopes
> that this New RAMP sets forth a reasonable and balanced path based
> solely on facts and or proven scientific data.

> Upon review of the proposed RAMP alternatives, I have genuine
> concern and would like record of my concerns recorded during this
> current RAMP process. My ultimate preference would be that all areas
> south of highway 78 be reopened for public use without closures.
> Please keep in mind that I am sensitive to the suggested issues of the
> Pierson's Milk Vetch. I state these as "Suggested Issues" as they were
> not based on any type of study. It has however, been found thru recent
> scientific data, that these proposed issues which resulted in actual
> closures - were not true. Rainfall has been identified as the sole key
> item linked to the success or demise of the Pierson's Milk Vetch, Not
> the use of off-road vehicles. At the moment, the draft RAMP does not
> include all available PMV documentation via recent studies performed
> (Lukenback and Bury reports). However, this is not a new issue, the
> false accusation of OHV Recreation impacting the PMV was even captured
> back in 2000 by the BLM's own in-house monitoring reports. The
> example given, in a report entitled "Monitoring of Special Status
> Plants Algodones Dunes, Imperial County," issued November 2000, BLM
> biologists made the following statement:

> "Although there are some limitations inherent in the data collected
> both in this and the WESTEC study, the 1998 data indicate that all 6
> special status plants [including the PMV] are at least as abundant and
> widespread in the entire dune system as they were in 1977. Further,
> their distribution and abundance in the OHV open area appear to be at
> least as great as was the case in 1977, with the possible exception of
> sand food, which may have declined somewhat. It is possible, however,
> that this apparent decline is an artifact of the time of sampling:
> because of logistical problems, the southern, open area of the dunes
> was sampled about two months later than the northern, closed area of
> the dunes.

> "The design of this study allows inferences to be made only to the
> entire dunes and to the large areas of the dunes within the open and
> closed areas. Although all 6 species appear to be at least as
> widespread and abundant in the entire open area in 1998 as they were
> in 1977, this likely results from the fact that OHV use in the open
> area does not encroach - at least very intensively - on much of the
> habitat of the plants in relatively large portions of the open area
> away from OHV staging areas."

> It has been proven overtime that the closures were in effect
> unwarranted since the beginning. Over the last 10 years Responsible
> Duners and various advocacy groups have made all possible efforts to
> educate fellow recreationalist of various issues in the ISDRA,
> including PMV. The existing Closures and proposed additional ones on
> the table do nothing to support a positive relationship between the
> OHV Community, FWS and BLM. When will we regain access to our Public
> Land? I'd love to continue on the peaceful rides within the microphyll
> woodland and central dunes areas, teaching my children the beauty of
> the Algodones dunes and its inhabitants. These are the key areas where
> nature and the respect of nature can be taught. How will I do so if we
> are cramped into smaller areas resulting in high crowds, traffic and
> frustration?

> * The closure of any areas adjacent to camping is unwarranted, we are
> responsible recreationalist.
> * Additional closures for critical habitat are unfounded, the current
> scientific data has proven it so.
> * Realignment of the critical habitat areas will decrease incursions.

> As a responsible visitor to the ISDRA I would respectfully request
> that the selected RAMP alternative have a minimal impact in accordance
> with the concerns as outlined above.

> Thank you for your consideration on this very important issue.

> Sincerely,

> Scott F. Anderson

> 1045 E. Badillo Street
> Covina, CA. 91724

From: [Victor Almeida](#)
To: caisdrmp@ca.blm.gov
Subject: Dramp Comment
Date: 08/04/2010 11:53 PM

Dear Erin,

I would like to bring up that by reducing the area of OHV activity in the ISDRA, the Government and environmentalists may be inadvertently producing an undesired effect. As the ISDRA becomes more crowded and use more restricted, it will have the effect of forcing OHV recreation to other areas, such as our mountains, forests, and beaches. These areas are much more environmentally sensitive than the sand dunes, and the result will be far greater environmental damage. While the sand dunes certainly have environmental issues, the North Algodones Dunes Wilderness Area provides a large portion of the total dunes area to preserve the flora and fauna. With a distinct barrier of Highway 78, the north dunes are virtually free of OHV and other disturbing activity, thus environmental protection is assured. On the other hand, in the mountains and forests, by the nature of the trees, brush, and terrain, environmental damage is likely to be far greater and can occur without any observation. The barriers intended to separate wilderness areas are less distinct and less observable. Law enforcement is much more difficult due to the difficulty of observation. If damage does occur, it will likely go unchecked and damage due to fires, will readily spread across boundaries. Several years ago, I had the opportunity to present this point of view to a very distinguished looking attendee at a RAMP scoping meeting who had elegantly presented her environmental viewpoint. After I presented my opinion, she responded that her associates had been having the same discussion and that they were also very concerned about the effects on the deserts in Baja California, where there are almost no resources for law enforcement, and the vast areas make it difficult to even observe damaging activities. It is my belief and conclusion that when a more global environmental impact is considered, the more OHV activity that is allowed in the ISDRA, the result will be that less environmental damage will occur elsewhere.

According to the RAMP/EIS, "BLM seeks to provide a comprehensive management plan to . . . manage the Planning Area for recovery and delisting of the Peirson's milk-vetch (PMV; *Astragalus magdalenae* var. *peirsonii*)". However, the RAMP/EIS does not explain what constitutes "recovery" of the PMV. As there is no Recovery Plan for this species, BLM and the United States Fish and Wildlife Service (FWS) should articulate some criteria which, if met, would indicate that the PMV has recovered and may be considered for delisting.

To the extent that BLM or FWS have identified recovery criteria for the PMV, please identify the technical data from which these criteria were derived.

There is no Environmental Species Act (ESA) requirement to close areas that the FWS has designated as CH for the PMV. Therefore, the RAMP/EIS must provide a rationale for closing all PMV CH to recreational use. That is, BLM must explain why the closures are necessary to the conservation and recovery of the species.

As for the PMV becoming extinct in the area due to Off-Roading in the dunes I feel has not been completely proven to me. There seems to be more PMV plants in the area that has constant vehicle use than the "wilderness" area that has been closed off for years. I want to point out a story I read in the Daily Review on July 13, 2003 The Battle Over Grazing. In the article they mentioned a little triangle of land in Martinez California where they had found a plant, the Contra Costa Goldfield, a diminutive flower found only on one other spot on the globe. The plant was in this valley where cattle had grazed for years. They found and counted half a million of these plants in this valley. The environmental experts decided that to protect the unique plants they would need to remove all the cattle from the valley. They also changed plans for a proposed highway improvement. Four years after they removed the cattle they only counted 30 flowers. Apparently the plants were thriving from the cattle grazing there. The environmental experts felt that the human element would disturb the plant but in fact it was the opposite effect. I think this may be the same effect with the PMV. More science needs to be done but I don't see

the plant disappearing in the dunes where we run the buggies.

Please consider my thoughts and facts when you decide the fate of my beautiful winter play land. I always make sure to pick up after we leave and that it is cleaner then when we arrived.

Sincerely

Al Almeida
BAD Buggies
2539 Williams St
San Leandro, CA

From: vdaddy@sbcglobal.net
To: caisdrmp@ca.blm.gov
Subject: Dramp Comment
Date: 08/04/2010 11:57 PM

Dear Erin,

I would like to bring up that by reducing the area of OHV activity in the ISDRA, the Government and environmentalists may be inadvertently producing an undesired effect. As the ISDRA becomes more crowded and use more restricted, it will have the effect of forcing OHV recreation to other areas, such as our mountains, forests, and beaches. These areas are much more environmentally sensitive than the sand dunes, and the result will be far greater environmental damage. While the sand dunes certainly have environmental issues, the North Algodones Dunes Wilderness Area provides a large portion of the total dunes area to preserve the flora and fauna. With a distinct barrier of Highway 78, the north dunes are virtually free of OHV and other disturbing activity, thus environmental protection is assured.

On the other hand, in the mountains and forests, by the nature of the trees, brush, and terrain, environmental damage is likely to be far greater and can occur without any observation. The barriers intended to separate wilderness areas are less distinct and less observable. Law enforcement is much more difficult due to the difficulty of observation. If damage does occur, it will likely go unchecked and damage due to fires, will readily spread across boundaries.

Several years ago, I had the opportunity to present this point of view to a very distinguished looking attendee at a RAMP scoping meeting who had elegantly presented her environmental viewpoint. After I presented my opinion, she responded that her associates had been having the same discussion and that they were also very concerned about the effects on the deserts in Baja California, where there are almost no resources for law enforcement, and the vast areas make it difficult to even observe damaging activities.

It is my belief and conclusion that when a more global environmental impact is considered, the more OHV activity that is allowed in the ISDRA, the result will be that less environmental damage will occur elsewhere.

According to the RAMP/EIS, "BLM seeks to provide a comprehensive management plan to . . . manage the Planning Area for recovery and delisting of the Peirson's milk-vetch (PMV; *Astragalus magdalenae* var. *peirsonii*)". However, the RAMP/EIS does not explain what constitutes "recovery" of the PMV. As there is no Recovery Plan for this species, BLM and the United States Fish and Wildlife Service (FWS) should articulate some criteria which, if met, would indicate that the PMV has recovered and may be considered for delisting.

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Sincerely

Victor Almeida

2241 West Ave 135th

San Leandro, CA

From: [al.almeida](#)
To: caisdrmp@ca.blm.gov
Subject: Dramp Comment
Date: 08/05/2010 12:00 AM

Dear Erin,

I would like to bring up that by reducing the area of OHV activity in the ISDRA, the Government and environmentalists may be inadvertently producing an undesired effect. As the ISDRA becomes more crowded and use more restricted, it will have the effect of forcing OHV recreation to other areas, such as our mountains, forests, and beaches. These areas are much more environmentally sensitive than the sand dunes, and the result will be far greater environmental damage. While the sand dunes certainly have environmental issues, the North Algodones Dunes Wilderness Area provides a large portion of the total dunes area to preserve the flora and fauna. With a distinct barrier of Highway 78, the north dunes are virtually free of OHV and other disturbing activity, thus environmental protection is assured.

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Sincerely

Albert Almeida

438 Lupine Way

Hayward, CA

From: kkading2@cox.net
To: caisdrmp@ca.blm.gov
Subject: Dunes
Date: 08/06/2010 01:40 AM

Hello-

My name is Kerry Kading and I live in Phoenix, Arizona. I am writing to you reference the new proposed closures to the ISDRA. I am hoping that alot of consideration, planning and thought went into the new plans that have been proposed. I would just like to say that any further closures, in my opinion, are not needed. If a rate increase would help keep more areas open I would be in favor of that then more closueres. Please take into considerations the options/views of the ASA, of which I am along time member. My family and friends have been going to the dunes for over thirty years and wish to continue.

thanks for your time and efforts.

Kerry C. Kading
30821 N 251st Ave
Wittmann, Az 85361
623-512-3213

From: [David Hubbard](#)
To: caisdrmp@ca.blm.gov
Cc: [Raine Fend](#); [Dick Holliday](#); [Robert Mason](#)
Subject: Comments on Imperial Sand Dunes RAMP and EIS
Date: 08/06/2010 10:36 AM
Attachments: [EcoLogic Comment Letter re DRAMP EIS 8-6-10.pdf](#)
[Exhibit B to EcoLogic Comment Letter re DRAMP \(Harrison Declaration\).pdf](#)

Dear Ms. Dreyfus:

On behalf of EcoLogic Partners, Inc. ("EcoLogic"), I hereby submit to BLM the attached comments on the Imperial Sand Dunes Recreation Area RAMP and EIS. Note that this comment letter also includes a link to a video and an attached declaration from acoustics expert Robin Harrison. Please ensure that both of these exhibits are included in the administrative record for this action. Thank you.

Sincerely,

David P. Hubbard

From: [eric ragan](#)
To: caisdrmp@ca.blm.gov
Subject: glamis
Date: 08/06/2010 11:43 AM

All I can say is that my family and friends, that is a total of 6 rigs drive twice a year for over 600 miles one way to come to glamis. To go that far for such a great place to be with each other. There are the ones who ruin things and make us all look bad, but that is a such a small percentage that is there at any given time. The money and revenue that the duners bring to the local community would kill the locals bossiness if we were shutdown. Thanks my personnel comments.

eric ragan ca resident

From: [Valerie Kastoll](#)
To: caisdrmp@ca.blm.gov
Subject: Fw: elcentro feedback
Date: 08/06/2010 01:13 PM

----- Forwarded by Valerie Kastoll/CASO/CA/BLM/DOI on 08/06/2010 01:12 PM -----

scott.bracken1@sbcglobal.net

To vkastoll@ca.blm.gov, mwest@ca.blm.gov
cc

08/06/2010 12:30 PM

Please respond to
scott.bracken1@sbcglobal.net

Subject elcentro feedback

name = Scott Bracken

organization = Taxpayer/Frequent ISDRA user

email = scott.bracken1@sbcglobal.net

subject = RAMP team

FeedbackType = Comment

request_comment = August 6, 2010

RAMP Team Lead

Attention: Erin Dreyfuss

166 South 4th Street

El Centro, CA 92243

Subject: Comments on 2010 Draft Recreation Area Management Plan

(DRAMP)

Dear Ms. Dreyfuss:

My name is Scott Bracken. My family and friends enjoy visits to the ISDRA throughout the fall and winter seasons and are becoming increasingly active in their care and management through our activities during our visit to include litter removal, and self policing of our camp sites. I have recently had the opportunity to review the proposed RAMP alternatives. As someone who has a direct interest in the outcome of these I would prefer seeing a hybrid solution of plan 7 and 8 being implemented.

I believe the current and proposed closures of certain areas of the ISDRA are unfounded. The closures are based on incomplete and incorrect data. It seems the BLM has ignored the findings of Dr. Art Phillip and Dr. Gle

nn Haas.

Their studies have shown that the PMV is not being destroyed by OHV travel. The vitality of the Pierson's Milk Vetch is affected more so on the amount of rainfall it receives and quite possibly thrives because of the OHV travel.

Above all I ask that the Bureau of Land Management (BLM) implement a plan based on sound science, without bias and incomplete studies. Remember, the decisions made greatly affect thousands of families and generations to come

Another concern is the impact these closures could have on not just the local dune area economy but the Southern California economy as a whole. I have a family of four. During a regular trip to the dunes, my family spends roughly \$500 on fuel, food and miscellaneous items. Twice a year we take longer trips which nearly double that figure. Overall, we make about 7

trips per season. Conservatively, we spend about \$4000 annually in the local dune and Southern California economy and we are just one family. If this figure were multiplied by the hundreds or potentially thousands of families no longer spending this money if the proposed closures take effect, it is not difficult to understand the extremely adverse effect this will have on an already tenuous economy. Thank you for your consideration.

Respectfully,

Scott Bracken

Corona, CA 92883

username123 =

sentinal = Sentinal

page_referred_from = <http://www.blm.gov/ca/st/en/fo/elcentro.html>

fo = 8

Submit = Send Request

From: [Gil](#)
To: caisdrmp@ca.blm.gov
Subject: Concerned Family
Date: 07/31/2010 05:54 AM

Below is information that I would not normally have, I however did find some very knowledgeable individuals and used their skills.

This is an area that is frequently used by my family each year for a very long time. Then as time has passed each year a little more restrictions are placed, a little less riding area. I will admit that there are individuals that bring a negative light to our sport and education over the years has helped to lower this mindset of a few as well as more enforcement. The closure of such a recreation spot would be horrendous in regards to off roaders and people who depend on that area for income.

I would hope that all information is being reviewed, that all sides are being allowed to use information as a tool. I would also hope that this is a fair decision and that political, social, and industrial influences are not the main consideration.

Thank you Gil Tapia

1. The DRAMP is fraught with superficial and incomplete data.

BLM has chosen to ignore the work of Dr. Art Phillips III. His work is comprised of a large body of published information and data regarding the distribution and ecology of the PMV. This is peer-reviewed science. More importantly, his studies were conducted in areas open to OHV operations that document PMV and OHVs can co-exist. This omission renders many of the DRAMP recommendations invalid.

Following are the references to the seven reports. These were sent annually to BLM in El Centro and FWS in Carlsbad, as well as other agencies. It is my understanding that ASA has recently sent electronic copies to BLM in case hard copies are missing from files.

Phillips, A. M., III, D. J. Kennedy, and M. Cross. 2001. Biology, distribution, and abundance of Peirson's milkvetch and other special status plants of the Algodones Dunes, California. Report submitted by Thomas Olsen Associates, Inc. to the American Sand Association. 29 p. ("TOA 2001")

Phillips, A. M., III and D. J. Kennedy. 2002. The Ecology of Astragalus magdalenae var. peirsonii: Distribution, reproduction and seed bank. Report submitted to the American Sand Association. 41 p.

Phillips, A. M., III and D. J. Kennedy. 2003. The Ecology of Astragalus magdalenae var. peirsonii: Germination and survival. Report submitted to the American Sand Association. 27 p.

Phillips, A. M., III and D. J. Kennedy. 2004. The Ecology and Life History of Peirson's Milkvetch in the Algodones Dunes, California: 2003-2004. Report submitted to the American Sand Association.

Phillips, A. M., III and D. J. Kennedy. 2005. The Life History of Peirson's Milkvetch (Astragalus magdalenae var. peirsonii) in the Algodones Dunes, California: 2004-2005. Report submitted to the American Sand Association.

Phillips, A. M., III, and D. J. Kennedy. 2006. Seed bank and survival of Peirson's milkvetch (Astragalus magdalenae var. peirsonii) in the Algodones Dunes, California, 2005-06. Prepared for the American Sand Association.

Phillips, A. M., III and D. J. Kennedy. 2007. Assessing the effects of drought conditions on Peirson's Milkvetch (Astragalus magdalenae var. peirsonii) in the Algodones Dunes, California, 2006-07. Report submitted to the

The commenters listed on the following pages submitted the following form letter in full or with slight variation:

The Algodones Dunes is a national treasure of biodiversity in one of the most arid regions in the country. The dune system and the unique plants and animals it supports require the highest levels of conservation. Massive amounts of unrestricted off-road vehicle (ORV) activities are an inappropriate use for the Algodones Dunes—especially in areas of habitat for rare plants and animals. I urge the BLM not to roll back environmentally protective measures put in place a decade ago to benefit the unique dunes ecosystem. The BLM should consider a more equitable balance between uses at the Algodones Dunes and conserve at least half of the dunes for the rare species and habitats that have lived there for thousands of years. I oppose opening any additional areas to ORV use because of the harm ORVs cause to rare species and habitats. Areas of rare microphyll woodlands should also be conserved because of the essential benefits these oases provide.

Frank Aaron	Lisa Adams	Kristen Albritton	Michael Allen
Matthew Aarsvold	Gail Adams	John Alden	Aaron Allen
Andrew Abate	Peter Addyman	Stella M Aleman De Gallardo	Arden Allen
Isabella Abbiati	Neill Adhikari	J Alexander	Mary Allen
Abrehet Abdu	Kathleen Aftab	David Alexander	Maria Alonso
James Abendroth	Monique Agia	Mary Alexander	Jeff Alonzo
Thomas Aber	Laura Agin	Jenifer Alexander	Kristen Alspaugh
Shannon Abernathy	Paul Agosta	Charles Alexander	Ann Alston
Sally Abrams	Heidi Lynn Ahlstrand	V Alexander	Craig Althage
Elizabeth Abrantes	Edwin Aiken	Elaine Alfaro	Angelika Altum
Nora Acevedo	Akebono Airth	Jeff Alford	Sarah Alvarez
Frank Ackerman	Anthony Albert	Kim Alfredsson	Ana Alvarez
Alberto Acosta	Marilynn Albert	Oscar Alguacil	Madeline Amalphy
Julie Acs	John Albertini	Maria Alicandu-Thurman	Patricia Amazalorso
Evelyn Adams	Deni Albrecht	Robert Allen	Michael Ambroszewski
Nancy Adams	Michael Albrecht	Wanda Allen	Revathi Ananthatkrishnan

Janis Andersen	Gina Antonio	Elaine Aronoff	Bill Azevedo
John Anderson	Martin Antuna	Heidi Arp	Bill Azevedo
Amy Anderson	Estefania Aparicio	Raul Arribas	Wendy Babbe
Marketa Anderson	Isabella Aquino	Richard Arthur	Karen Babcock
Karin Anderson	Isabel Araujo	Terry Asbury	Christina Babst
Pat Andler	Emilio A Araya	Helen Ashford	D Baca
Robert Andrade	Nancy Arbuckle	Valerie Ashley	Tinker Bachant
John Andrews	Nancy Archibald	Chris Ashton	T Bachelor
Michelle Andriani	Aries Arizona	Sam Asseff	Ariel Backman
Jorge Andromidas	Terri Armao	David Asselin	Pan Bacon
Jl Angell	Salme Armijo	Stephanie Aston	Gloria Bahrns
Lovin Animals	Robert Armstrong	April Atwoodr	Christopher Bail
Lovin Animals	Briggitte Arnold	Patrick Aubuchon	Joe Bailey
Ronald Ankowski	Karen Arnold	Jenni Audette	Michael Bailey
Paul Anthony	Pat Arnone	Candi Ausman	Shayna Bailey
Mattioli Antonio	K Arone	Nikki Ayres	Alan Bailey

David Bailey	Lynne Banta	Goldie Barnett	Candace Batten
Brad Bailey	Karen Baouche	Robert Barnhart	Annick Baud
Tanya Baker	Amy Barbagallo	Ruth Barrett	Kim Bauer
Laurie Baker	Sharon Barbell	Manuel Barrios	Jamie Bauer
Kelli Baker	Pat Barbutti	Deborah Barros	Kim Bauer
Kelsey Baker	Erin Barca	Amanda Barry	Andrew Baumline
Michelle Baker	Brenda Barcelo	Ann Bartell	Melvin Bautista
Leslie Bald	Theresa Barclay	Kelly Barth	Leticia Bayona
Laura Baldwin	Cameron Barfield	Regina Barth	Hannah Beadman
Desiree Ball	Bonnie Barfield	Beverly Barth	Marion Beagen
Eldon Ball	Carolyn Barkow	Marilyn Barthelow	Mel Bearns
Cecilia Ball	Pat Barnes	Eddie Bartley	Sandra Beatty
Rebecca Ballard	Lynn Barnes	Catherine Basciano	Paul Bechtel
Sera Balmat	Linda Sue Barnes	Mae Basye	Carolyn Beck
Carol Banever	Christina Barnes	Natalie Batovsky	David Beck
Madeline Banschbach	David Barnes	Athena Batsios	Beth Beck

Elaine Becker	Tony Bell	Ricardo Berg	Ruth Bescrypt
Barbara Becker	Cheryl Bellrose	Julia Bergen	Ruth Bescrypt
Marie Beckham	R Belsher	Amy Bergmann	Barbara Besold
Mark Beckwith	Kristen Bender	Elan Berko	Suzanne Bess
Theresa Bedford	Michelle Benes	Henry Berkowitz	Lauren Best
Isabelle Beecy	Nancy Benner	Diane Berliner	Heidi Betts
Leigh Begalske	Edward Bennett	Cathy Berman	Anne Betts
Sue Beilke	Henry Bennett	Richard Bernardoni	Angela Beverly
Katharine Beisner	Emma Bennett	Anna Bernath	Peter Beves
Daniel Belachew	Colin Bennett	Michael Berndt	Dirk Bevign
Michelle Belanger	Barbara Benningson	Sherri Bernhard	Andrew Bezella
Lynette Belew	Tamsen Benson	Laura Bernstein	Russell Bezette
Sharon Bell	Corie Benton	Marilyn Bernstein	Sara Bhakti
Denise Bell	Pamela Benton	Megan L Bertaccini	Kenneth Bickel
James Bell	Ka Benzel	Marc Beschler	Frank Biermann
Taylor Bell	Myra Berario	Ellen Beschler	Alan Biggar

Amy Biggs	Marianne Bithell	Gwen Blodgett	Rebekah Bonney
Amy Biggs	Angela Black	Charles Bloom	Margarita Bonnin
Louise Bikoff	Janet Black	Gerald and Louise Blume	Justin Bonsey
Kirsten Bilderaya	Monica L Black	Christine Blunt	Marcia Bonta
Leslie Billings	Barbara Blackburn	Emilia Boccagna	Francoise Bonte
Georgil Billiris	John Blair	Patricia Bode	A Bonvouloir
Barbara Bills	Clara Blair	Larry and June Boersma	Nancy Booth
Sierra Bingham	Chai Blair-Sttahn	Denise Boggs	Celeste Boralli
Silvia Bioli	J Blaisdell	Hal Bogotch	Rj Bordelon
Cary Birdwell	Sharlane Blaise	Susan Bohannan	Caroline Bordenkircher
Connie Birkenmeier	Van and Eileen Blakeman	Ruth Boice	Gary Boren
David Birnbaum	Shawns Blaker	Isa Boisgard	Maria Borges
Melissa Bishop	William Blanchard	Geoff Bommelaere	Edith Borie
Cori Bishop	Gerrilynne Blattner	Donna Bonetti	Rachel Bormann
Nancy Bishop	Steven Blauer	Laurie Bonham	Gavin Bornholtz
Stacey Bishop	Gary Block	Carmen Bonilla-Jones	Audra A Borroughs

Cindy Borske	Thomas Boyd	Julia Brandner	Thomas Brenner
Marlene Borth	Nanc Boyd	Marisa Brandsetetter	Noah and Natasha Brenner
Matthew Boruta	David Boyer	Carsten Brandt	Tina Brenza
Sandra Bosben	Jayne Boyer	Karen Brant	Sheri Bresson
Marie-Luise Boschen	Donald Bradburn	Clait Braun	Cb Bretschneider
Martha Bosma	David Bradbury	Karin Braunsberger	Heidi Brewer-Choate
Vic Bostock	Anita Braddock	Cheryl Braxton	Julie Brickell
Allessander Botti Benevides	James and Alice Bradley	Adam Brazil	Birch Bricker
James Boulton	Rhonda Bradley	Christine Brazis	Adrienne Brietzke
Jessie Bourke	Becca Bradshaw	Sara Breakfield	William Briggs
Jc Bower	Connie Brady	Misty Breaux	Alexandra Brigham
Elizabeth Bowles	Thomas Bragg	Jospeh Breazeale	David Brimmer
David Bowman	Georgia Braithwaite	Linda Brebner	Thomas Brinkman
Jason Bowman	Evelyn Brakopp	Bonnie Breckenridge	John Brinkman
Renae Bowman	George Bramwell	Joan Breiding	Maria Brion
Teresa Box	Anita Brandariz	Charmaine Breitengross	Rochelle Briscoe

Bob Brister	Cassandra Browning	Janine Buckley	Paul Burke
Paul Brizzi	Wayne Brumley	Michelle Buerger	Mary Ann Burke
Annie Brock	Carrie Brummette	Joseph Buhowsky	Kerry Burkhardt
Gary Brooker	Linda Bruner	Heidi Buitron	David Burkhart
Donna Brooks	Savannah Brunnemann	Grace Bukowski	Michael Burmester
Allan Brookstone	Kim Brush	Karen Bullis	Joy Burns
Julia Broome	Alana Bryant	Elizabeth Bullock	Judy Burns
Potsy Brothag	Pam Bryant	Albert Burchsted	Joanne Burns
Diane Brower	Bill and Joyce Bryson	Linda Burger	Catherine Burns
Ronald Brown	Carolyn Buchanan	Vivian Burgess	Frank Burtnett
Lolly Brown	Roy Buchanan	Kh Burgess	Vic Burton
Scott Brown	Scott Buchner	Kat Burgess	De Bush
Claire Brown	Helen Buck	Jeff Burgess	Evan Bush
Susan Brown	Bradley Buck	Linda Burgess	Kyle Buss
Anne Brown	David Buck	Diane Burgin	Heather Busse
Rebecca Browning	Kathleen Buckley	Soodle Burke	Dottie Butler

Edward Butler	Linda Cain	Renato Campino	Richard Cardella
Linda Butler	DI Caisse	Stacey Cannon	Hortencia Cardenas
Elizabeth Butler	Vicki Calderon	Elizabeth Cannon	Tania Cardoso
Rita Butler	James Caldwell	Rosemary Caolo	Amy Carletti
Alicia Butscher	Maeve Callaghan	Jerilyn Capaccione	Chris Carlon
Kathryn Buttles	Gloria Ann Callahan	Angela Capinera	Matthew Carlson
Maryanne Byington	Teresita Callen	Anthony Capobianco	Cheri Carlson
Brenda Byrne	Aurora Cameron	Michele Caporaso	Steve Carothers
Kelly Byrnes	Denise Cameron	Jeanette Capotorto	Kim Carothers
Lara Byrns	Roberta Camp	Sharon Cappuccio	Laura Carr
Steve Byrum	Thomas Campbell	Mary Beth Caracciolo	Diana Carroccia
K C	Chris Campbell	Alyssa Caralla	Nial Carroll
Shelley Caballero	Kerry Campbell	Duane Carbon	Mark Carroll
Alfonso Cachu	Steven Campbell	Junko Card	Felicity Carroll
Terry Cadwallader	Theresa M Campbell	Geraldine Card-Derr	Carol Carson
Ray Cage	Alexandra Campbell	Sylvia Cardella	Tanya Carson

Winfield Carson	Gail Caswell	Christine Champe	Nadine Chatel
Pat Carter	Melissa Catchcart	Sonja Chan	Kim Chaudoir
Leonore Carter	Barbara Caton	Anshuman Chandra	Elizabeth Che
Judith Cartisano	Haley Caulfield	Patricia Chang	Pamela Check
Jennifer Cartwright	Janet Cavallo	Dawn Chapdelaine	Patricia Chelmecki
Donna Casarez	Adriane Ceglie	S. Chapek	Rosaline Chen
Mr. & Mrs. Casazza	Fred Cepela	G. Clarke Chapman	Mich Chen
Brenda Casey	Robert Cerello	Sam Chapman	Alicia Chen
Eva Cashdan	Catherine Cerqua	Bert Charest	Allan Chen
Victoria Casillas	Louie Cervantes	Laura Chariton	Christina Chen
Rita Casolari	John Cevasco	Jeff Charity	Anne Cheng
Cathy Casper	Jesse Chacon	Stacie Charlebois	John Chere Iii
Rebecca Cassara	Joanna Challacombe	Stanley Charles	Jennifer Cherniss
Janine Castaldo	Sarah Chamberlain	Michele Chartier	Karen Chesney
Carolyn Castro	Ronald Chamberlin	Dave Chase	Antonia Chianis
Luisa Casu	Craig Chambers	Celeste Chase	Sam Child

Margaret Childers	Jennifer Ciambrone	Diane Clark	Marilyn Coats
Pete Childs	Susan Ciaramella	Loralee Clark	Didem Coban
Nat Childs	Robert Cierlitsky	Diane Clark	Bethany Cobb
Dg Chilson	Dorothy Cinquemani	Loralee Clark	Bruce Cobbledick
Karen Chinn	Todd Cisna	Karen Clarke	Ben Cochran
Rosemarie Chinni	Alexis Cisneros	Lisa Clark-Kahn	Lisa Coffman
Andrea Chisari	Alexis Claar	Roberta Claypool	Bruce Cohen
H Chisholm	Brad Clardy	Michael Clayton	Judy Cohen
Duane Choy	Donna Clark	Robyn Cleaves	Theresa Cohen
HI Chrissos	Liz Clark	Julie Clemons	Laurel Cohen
Jim Chumbley	Stuart Clark	Michael Cloud	Diane Coiner
K Chung	Patricia Clark	Lois Clymer	Zach Colatch
Samantha Church	Stephen Clark	Richard Coan	Brenda Colbert
J Churcher	Gary Clark	Arthur E. Coates	Dan Colbert
J Churcher	Jon Clark	Portland Coates	Elizabeth Colby
Cc Churilla	Kristen Clark	Patty Coates	Courtney Cole

Maria Colegas	Vira Confectioner	Holli Cook	Fletcher Cossa
Kevin Coleman	Christina Congedo	James Cooke	Mike Cossa
Leo Collazo	Harmony Conger	Ty Coon	Demelza Costa
Geri Collecchia	Craig Conn	Toby Cooper	Luana Costanzini
Brenda Collins	Walter Connelly	Richard Cooper	Shawn Costello
Carol Collins	Eileen Conner	Jason Cooperrider	Maya Costley
Barrie Collins	Debbie Connery	Richard Corbat	Joyce Cotter
Jean Colombo	Neal Connolly	Jc Corcoran	Sandra Couch
Merry Colony	Anna Connolly	Linda Corey	Nancy Coulombe
Joanne Colson	Ann M Connor	Jared Cornelia	Walter Courtenay
Debbi Coltharp	Faith Conroy	Bonnie Corno	Pam Courts
Bruce Colton	James Conroy	Tonya Cornwall	Cathy Cousins
James Columbia	Carlo Console	Stephanie Corona	Dawn Cowan
Pamela Colwell	Delbeert Contival	Marta Correia	Larry Cowden
Matthew Combs	Delbeert Contival	William Corry	Edythe Cox
Janel Compton	Susan Conway	Laura Cosentino	Brian Cox

John Crabtree	Charles and Susan Creel	Val Crowley	Nancy Cunningham
George Craciun	Jill Cresko	Diana Crowson	Peter Curia
Patty Crack	Catherine Critz	Doris Cruz	Marianne Currie
Cindy Crafword	Scott Crockett	Erica Crytzer	Tierra Curry
Edward Craig	Landis Crockett	Laura Cuccia-Nilsen	Eileen Curtin
Ella Craig	Denise Croft	Laura Cuccia-Nilsen	Pam Curtis
Isobel Craig	Ruaidhri Crofton	Kermit Cuff	Robin Cusick
C Cramer	Carolyn Croom	Marcella Cuicki	Rose Cypret
Lynn Crandall	Christina Crosby	Laraine Cullen	Bruce Cyr
Analisa Crandall	Heather Cross	Kyle Cullen	Cigy Cyriac
Mark Crane	Dave and Rita Cross	Diana Cumming	Margaret Cytryn
Alex Crane	David Cross	L Cummings	S D
Elisabeth Crane	Gerrit Crouse	Lisa Cummings	Michelle D
Mark Crane	Gerrit Crouse	Monica Cunningham	Lisa Dadgar
Marcella Crane	Benita Crow	Debra Cunningham	Kristiana Dahl
Dennis Crean	Rebecca Crowder	James Cunningham	Becky Daiss

Casey Dake	Marinell Daniel	Jim and Molly Davis	Marta De La Fuente
Emily Dale	Jane Daniels	Faith Davis	Octavio De La Torre
Catherine Dale	Denise D'anne	John Davis	Piet De Nennie
John Dalla	K Danowski	John and Susan Davis	Frederic De Pujo
Susan Dallas	Kevin Darcy	William Davis	Philip De Rosa
Lisa Daloia	Roger Darden	Lori Davis	Eddie Dean
N. Dalton	Cheryl Dare	Hillary Davis	Sue Dean
Donna Damarodas	Anita Das	Galen Davis	Carol Deantoni
John D'ambra	S. Das	Pat Davis	Hellen Deassis
Anthony Dambrosi	Joan Davanzo	William Davis	Stacey Deck
Paul Damian	Susan Davenport	K Davis	B Deckard
Stephen Damko	Linda Davidson	A Davis	Rebecca Delekta
Lisa D'andrea	Josh Davidson	Nancy Dawley	Jennifer Delker
Gloria D'andrea	Margaret Davies	Valerie Dawnstar	Pete Delorenzo
William Dane	Margaret Davies	Robert De Beck	Gennaro Delucia
Sherry Daniel	James Davies	Judy De Groot	Jan Deluke

Jackie Demarais	Maggie Depaulo	Amy Dingman	Bonnie Dombrowski
Christi Demark	Rodney Derbigny	Aileen Dinh	Lori Domingos
Renee Demartin	Tiffaney Derreumaux	Jonathan Dirrenberger	Shelley Donahue
Hillary Demetropoulos	Randi Desiderio	Susan Dobbelaere	Mark Donaldson
Patrick Deming	Lillian Deslandes	Michael Dobbs	Chuck Donegan
Gail Demirtas	Juell Despain	Carol Dobson	Leslee Doner
Jennifer Demoss	Danny Detora	Sara Dodson	Debbie Donofrio
Hannah Dempsey	Laura Devine	Tom Dohearty	Sue D'onofrio
Bert Denenberg	Melvin Dickerson	Michael Dohn	Karen Donohue
James Denison	Kelley Dickey	Dimitrios Doinakis	Stephan Donovan
John Denk	Beth Dierks	Cara Dolan	Marian Donovan
Joan Denman	Beth Dierks	Ellen Dollar	Valerie Dorn
Elizabeth Denning	Samantha Dille	Alina Dollat	Marijean Dornback
Gudrun Dennis	Pamela Dillehay	Daniele Dolleans	Annamarta Dostourian
Rachael Denny	Christopher Dillon	Adrienne Dollyhigh	Candidus Dougherty
Michael Denton	Stoyan Dimitrov	Suzanne Dolwick	Tammy Douglas

Dianne Douglas	Chris Drumright	Alisa Dunn	Ann Eastabrooks
Kenneth Douglas	Helen Drwinga	Laura Dunn	Marylou Eastes
Ka Douglass	Gretchin Dubose	Kenneth Dunn	Mr Eastman
Lisa Douglass	Tim Duda	Ivailo Dunov	Michael Easton
Sandra Downie	Michelle Dudeck	Marissa Dupont	Steven Eatock
Rosamund Downing	Michael Duffey	Christopher Duran	Chris Eaton
Laurance Doyle	Robert Duffy	Jan Duran	Carola Ebertz-Knop
Chris Dragon	Dan Dugan	Brian Dusel	Chris Ecker
Terrakian Dragon	Michael Dulock	Jeanne Dutto	Elisa Edgington
Chris Dragon	David Dumas	Jean-Francois Dutto	Maria Edlund
Steve Dreben	Charles Duncan	Charlene Dye	Steven Edmonds
Joel Drembus	Charles Duncan	Jason Dyer	Jane Edsall
Beth Drewelow	Frances Dunham	Vladislav Dzambic	Judith Edwards
Carmen Druke	Irwin Dunietz	Juliette Dzija	Jeri Edwards
Carmen Druke	David Dunkleberger	Kathi Dzuryachko	Evangelina Efthimiadou
Anna Drummond	Denise Dunlap	Sarah Easley	Erick Egertson

Marion Ehrlich	Alison Ellsworth	M Epton	Jonathan Evans
David Ehrman	Ernest Ely	Kristin Erbach	Nick Evans
Stephen Ekholm	Nancy Emblom	Kristin Erbach	Stephen Evans
Glenn Eklund	Lorna Emdy	Bruce Ernst	Patricia L. Evans
Mary Eldredge	Kurt Emmanuele	Karen Ernst	A.S. Evans
Roxanne Eldridge	Samantha Emswiler	Herbert Escher	Amanda Evans
Jeanne Elisha	Russell Engbretson	Victor Escobar	Tracy Eve
Cheryl Elkins	Christine Engel	Denise Espinoza	Heather Evrin
Julie Elliott	Erin Enger	Dan Esposito	April Ewaskey
Lynn Elliott	Constance Engle	R Espoz	Paul and Miriam Ezust
Richard Elliott	John English	Nicholas Esser	Lisette Fabian
Robert Ellis	Kim English	John Essman	Fred Fabry
Deb Ellis	Elena Ennouri	Sarah Estes	Patrick Facht
Candice Ellis	Brian Enright	Sara Esteves	Deb Fahey
P Ellison	Pamela Ensign	Donna Etheridge	Shoshanna Fahima
Cori Ellison	Ann Eppler	Jardin Etienne	Vivian Fahlgren

Jordan Fairhead	Albert Fecko	Gaby Ferreol	Elaine Fischer
Rob Falca	Mark Feder	Paul Feschuk	Lynn Fischer
Ashley Falkenstein	Audrey Fee	Jim Fiddler	Emilia Fisher
Doncy Falvey	Lawrence Feigenbaum	Ed Fiedler	Audrey Fisher
Dominick Falzone	John Feissel	David Fiedler	Marlene Fisher
Ralph Famularo	Helen Feld	Michael Field	Cheryl Fisher
John Farina	Nancy Fellenz	Eva Figueiredo	Brendan Fisher
Nolan Farkas	Steven Fenster	Tamara Filas	James Fishgold
Darla Farr	Ed Feraco	Heather Files	Peter Fissel
Sally Ann Farr	Michael Feran	Heidi Filipowic	Loreli Fister
Courtney Farrell	Cheryl Fergeson	Mary Fineran	James Fitch
Marilynn Fasick	Patricia Ferguson	Tom Finholt	Charles & Kathleen Fitze
John Faust	Rosendo Fernandez	Mary Lou Finley	Joseph Fitzgerald
Vanessa Favero	Rosendo Fernandez	Mark Finn	Joseph Fitzgerald
Bob Fay	Linda Ferreira	Marilyn and Tom Finnelli	Joseph Fitzgerald
Angela Fazzari	Rebecca Ferrell	Mark Fiore	Christopher Fitzpatrick

Marianne Flanagan	Sharon Foley	Irina Foster	Harriette Frank
Rita Flasetto	Gunther Fonken	Janet Foster	John Franklin
Desiree Fleck	Sara Fontani	Nancy Foster	Antje Fray
Hadassah Fleishon	Susie and Jimmy Foot	Delaina Foster	William Frayer
Laura Fleming	John Forbes	Michelle Fournier	Jules Fraytet
Claire Flewitt	Rachel Ford	Eric Fournier	Jules Fraytet
John Flintcraft	Julie Ford	Kenna Fowler	Shelley Frazier
Rick Flood	Roberta Forest	Robin Fox	Nicholas Frederick
Jozon Florence	Georgiana Forester	Jane Fox	Gianfranco Frelli
Jozon Florence	Lyne Forget	Louise Foxe	Leeann French
David and Suzanne Florin	Tiffany Formilan	Brianna Frachtman	Rosemary French
Janelle Floyd	Jennifer Formoso	Stefano Fragasso	Jerry Freudenburg
Mary Floyd	Jillian Forschner	Arturo Franco	Cynthia Fricano
Kathryn Flueck	Maryanna Foskett	Edward Frank	Amy Frieden
Heather Flynn	Janice Foss	Patrick Frank	Tamara Friedler
Orsino Flynn	Lorraine Foster	Arwen Frank	Barry Friedman

Carolyn Friedman	Terri Fulton	Fairlee Gamble	Cristina Gatti
Warren Fries	Chad Fuqua	Amy Ganahl	Liana Gayler
Michelle Friessen	Mary Furth	Sandra Garber	Nikki Gaylord
Eva Fritz	Krista G	Kathe Garbrick	Ruth Gedge
Andrew Froehle	Ellen Gachesa	Charo Garcia	Ruth Gedge
Susan Marie Frontczak	Scott Gaffke	Susan Garcia	Judy Genandt
Chris Frost	Malcolm Gaffney	Toty Garcia	Derek Gendvil
Denise Frullo	Kyle Gage	Susan Gardner	Annick Gentet
Sherri Fryer	Keith Gagomiros	Anu Garg	Alberta Gentleman
Allison Frymoyer	Anna Galanos	Jamila Garrechtj	Jeremiah George
Yelna Fudym	Linda Gall	David Garrett	Donna George
Kristina Fukuda-Schmid	Sarah Gallagher	Jo Anneg Garrett	Patricia George
Rebecca Fulco	Kevin Gallagher	Jorge Garriga	Pete Giacca
Jennifer Fullem	Kelly Gallagher	Ed Gary	Pete Giacca
Tom Fuller	Janel Galvanek	Kathryn Gasser	Anthony Giannantonio
Debra Fulop	Niechele Gambill	Gayla Gatling	Mario Giannone

Michael Giansiracusa	Abigail Gindele	Ron Goldman	Lisa Goodrich
Nancy Gibson	Deborah Giordano	Louis Goldstein	Sue Goodrich
Joana Gibson	Allison Glancey	Jim Goldstein	A Goodruff
Kenneth Gibson	Marilyn Glasgow	Richard Golek	Bradford Goodwin
Bruce Gibson	Jill Gleeson	Beatriz Gomes	Michael Gordon
Dale Giese	Julie Glenn	Alyssa Gomez	Dara Gorelick
Camille Gilbert	Janice Gloe	Pilar Gomez-Alcala	Francis and Patricia Gorman
Jane Gilbert	Kris Glover	Ian Gonzales	Lois Gorrell
Sandy Gilbert	Hope Gmyrek	Steve Gonzales	Wendy Gosker
Valerie Gilbert	Gay Marie Goden	Elisa Gonzalex	Lisa Gosnell
Sally Giles	Candace Godfrey	Veronica Gonzalez	Lyn Gottschalk
Raymond Gill	Ann and Eric Godfrey	William Gonzalez	Aisha Goulden
Sharon Gillespie	Abhinav Goel	William G Gonzalez	Jennifer Goyette
Kenneth Gillette	William Goggin	Cheryl Goodberg	Roland Goyette
Matt Gilsdorf	Annette Goings	Doug Goodman	Hope Grable
Nicholas Gimbrone	Alliston Golden	Christine Goodreau	Chuck Gracer

M. Virginia Grady	S Gray	Rosemary Griffith	Peggy Grossman
Bettina Graf	Patricia Graziano	Jennifer Griffith	Josephine Grotle
Rosemary Graf	Ann Green	Jane Griffiths	Ravi Grover
Frank and Mary Ann Graffagnino	Pamela Green	Eugenia Grignon	John Gula
Amanda Graham	Mary Green	Charlotte Grillot	Rebecca Grundy
Clayton Graham	Corinne Greenberg	Susan Grimwood	Richard Grzeskowski
Peggy Graham	Corinne L Greenburg	Jon Gripshover	Santi Guallar
Lauren Gramlich	Terri Greene	James Grizzell	Cara Gubrud
Dabra Grant	David Greene	Ivana Grmoja	Michael Guckian
Ian Grant	Ken Greenwald	Annette Grohman	Michael Guenza
Noreen Grassi	Art Greenwalt	Paul Grohman	Peter Guerrero
Dori Grasso	Anna Greer	Ashley Gronski	Sam Guffey
Caryn Graves	Sabine Greger	Gene Groom	Nastassia Gumuchdjan
Marc Grawunder	Daniel Greider	Andrea Groppe	Elizabeth Gunston
Roxy Gray	Evangeline Greiner	Emily Gross	Karlene Gunter
Lucian Gray	William Griffin	Janet Grossman	Matthew Guptail

Rae Ann Gustafson	Milad Hakimbashi	Sue Hamber	Yvonne Hansen
Rand Guthrie	Carlyn Halde	Pamela Hambleton	E. Sue Hansen
Nickolas Gutierrez	Sharon Hale	David Hamby	Kathy Hanson
Marie Gutkowski	Kim Haley	Tricia Hamilton	Hashi Hanta
Diana Guzman	Kimberly Halizak	Tricia Hamilton	Ronald Harden
Gaby H	Chris Hall	Lynn Hamilton	Fann Harding
Jordana H.	Michaela Hall	Rick Hammel	Mark Hargraves
Anssi Haapala	Suzanne Hall	Tim Hammond	Jana Harker
Gloria Hacker	Jennifer Hall	Julianne Hammond	Amy Harlib
Sarah Hafer	Andrea Hall	Dianne Hampton	Alex Harling
Nancy Hafner	Gregory Hall	Kristen Hampton	Whitney Harlow
Mc Hagerty	Robert Hall	Richard Han	Joseph Harper
Pam Hagy	Sue Halligan	Pat Hanbury	Linda Harrell
Todd Hahn	Alison Halm	Melissa Hanmer	Frances Harriman
Gordon Hait	Gabrielle Halpin	Sarah Hanneken	Michael Harrington
Gordon Hait	Heather Halvorson	Mike Hansen	Bruce Harris

Theodore Harris	Michael Haskell	Rob and Lucy Hays	Jeanne Held-Warmkessel
Lois Harris	Michael Haskell	Chris Hazynski	Annissa Helm-Loyd
Melissa Harris	Paul Haskins	Linda Heagy-Len	Susan Helstetter
David Harris	Marjorie Hass	Aa Healy	Daria Hemmings
Shirley Harris	Neil Hastings	Ray Hearne	John Hendershot
Jamie Harrison	Kathleen Hastings	Diane Heath	Jessica Henderson
Jennifer Harrison	Barry Hatfield	Dolores Heath	Carol Henderson
Randy Harrison	Gloria Hatrick	Debbie Heaton	Colin Henderson
Tracy Hart	Lisa Haugen	Linda Heiaertz	Richard Hendricks
Sophia Hartdegen	Shelby Haukos	Andra Heide	Kristi Hendrickson
Mary Harte	Barb Hauser	Jessye Heilman	Chip Henneman
Hannah Harte	Anita Havas-Stainton	Linda Heimbach	Dakota Hennessey
Jeanne Hartzog	Maureen Havey	Philip Heinlein	James Henriksen
Mark & Judy Harvey	Whitney Hawks	Christian Heinold	Devin Henry
Sarah Harvey	Libby Haycock	Gail Heinz	Marilee Henry
Hugh Harwell	Jennifer Hayes	Peggy Heisel	Mariechen Herbold

Vickie Herdman	David Hickey	Frank Hill	Bernard Hochendoner
Jill Herman	Mary Hicklin	Valerie Hill	Cara Hochhalter
Eloy Hernandez	Robert Hicks	Freya Hill	Naomi Hochstadt
Wendy L Hernandez	Collin Hien	Susan Hill	Connor Hocking
Christian Hernandez	Richard Hiers	Shannon Hillary	Tonya Hodge
Laura Herndon	Keith Hiestand	Mary Hills	Suzanne Hodges
Jon Herrera	Bruce Higgins	Gordon Hills	Karen Hodges
James Herron	Janice Higgins	David Hind	Mark Hodie
James Herther	Howard Higson	Norman Hines	Donna Hodsdon
Marcia Hertz	David Hild	Charles Hines	Britta Hoeyberghs
Tim Herzog	Joel Hildebrandt	Robert Hinkelman	Michelle Hoff
Catherine Herzong	Jaclo Hileman	Kenneth Hittel	Terry Hoffman
Michael Hester	Jennifer Hill	Susan Hittel	Jeff Hoffman
Galina Heuer	Misako Hill	Cathleen Hjalmarson	Mary Hoffman
Christopher Heuman	Robert Hill	J. Siska Hjelmgren	Vanessa Hoffman
John Heyneman	Sally Hill	Mike Hlat	Sherrie Hoffmann

Carl Hoffmeister	Barbara Holtz	Kathryn Hotarek	Stanley Hudson
William Hofford	Dorothy Holtzman	Ali Hotmer	Rina Hudson
Tom Hofmeister	Dennis Holz	Tara Hottenstein	Richard Huff
Kathleen Hogan	Victoria Holzendorf	Ae Houston	Melodie Huffman
Eugene Hogan	Michael Holzman	Isabell Houtahker	Jerry Hughes
Grace Holden	Robert Honish	Debra Hoven	Krissy Hughes
Katherine Holland	Mary Hood	William Howald	Haley Hughes
Fern Holland	Nick Hood	Clay Howard	Lorraine Hughes
Barbara Holler	Chris Hoover	John Howden	Donna Hughes
Greg Hollis	Jane Hope	Cee Howe	Cynthia Hull
Randi Holloway	Adam Hopkins	Linda Howe	Philip Hult
Nancy Holmes	Christopher Hopkins	Gary Hoyt	Fred Hummel
Brad Holmes	Elke Hoppenbrouwers	Patricia Hoyt	Kenneth Humphrey
Cassie Holmgren	David Hopson	Daniel Hubbard	Kristi L Hungary
Hope Holtum	Christine Horn	Steve Huber	Paul Hunrichs
Sue Holtz	Hanna Horowitz	Lesley Hudak	Laura Hunsinger

Otto Hunt	Marlene Hutchison	Josie Jackman	Janet Jamerson
Linda Hunt	Susan Hutko	Rachael Jackson	Matthew James
Erika Hunt	Aleata Illusion	Stephanie Jackson	Ghazale Jamsheed
Linda Hunter	Guy Indebetouw	Sandra Jackson	Nancy Janosko
Christopher Hunter	Susan Inman	Jennifer Jackson	Terry Janowitz-Fine
Kristin Hunter	Miriam Iosupovici	Bruce Jackson	Gayle Janzen
Stephanie Huntington	Teresa Iovino	Sue Jackson	Chagnon Jaquelyn
Sue Hurley	Lura Irish	Ginny Jackson	Nhelson Jaramillo
Jeffrey Hurwitz	Larry Irwin	Stacey Jackson	Keely Jared
Hasnath S Hussaini	Keiko Ishida	Mark Jacobs	Carol Jarvie
Robert Hutchings	Mary Sue Ittner	Don Jacobson	Kimberly Jarvis
Lee Hutchings	Miriam N Ivaldi	Robert Jacobson	Eden Jasper
Noel Hutchings	Norman Ives	Phyllis Jacoby	Alan Jasper
Noel Hutchings	Martha Izzo	Marth Jaegers	Bonnie Jay
Tiffany Hutchins	El Ja	Tina Jaime	Bonnie Jay
Kimberly Hutchins	Lisa Jablow	Edna Jamati	James Jeffrey

Albert Jenkins	Stephanie Johnson	Michelle Jones	David Kajtaniak
Robert Jenks	George Johnson	Rodney and Terri Jones	Natasha Kaluza
Karen Jenne	Paula Johnson	Curtis Jones	Inga Kaminski
Anita Jennings	Lindsay Johnson	Edmund Jones	John Kaminski
Renee Jeska	Virginia Johnston	Gloria Jones	Margaret Kaminski
Darynne Jessler	Ken Johnston	James Jorgensen	Jan Kampa
Darynne Jessler	Jackie Johnston	Brookie Judge	Mischa Kandinsky
Matt Johansen	David Joiner	Christopher Judge	Susan Kane
Heather John	Robert Joll	Eileen Jumikis	Deborah Kanzler
Juliet Johns	Karen Jones	Carol Jurczewski	Stephanie Kaplan
Lorraine Johnson	Gina Jones	Ben Justiss	Kenneth Kapointe
Kevin Johnson	Allan Jones	Laura Juszak	Peter Karlsson
Amber Johnson	Eric Jones	Valerie Kadium	Katherine Karriker-Jaffe
Sarah Johnson	Chris Jones	Judy Kahkonen	Lawrence Kassan
Tina Johnson	Linda Jones	Kay Kaiser	Dora Kassis
Rob Johnson	Johanna Jones	Katie Kaiser	Diane Kastel

Dc Katten	Bonnie Kelchner-Bunn	Kate Kenner	Carolyn King
Adene Katzenmeyer	Steven Keleti	Frances Kenny	Michael King
Adene Katzenmeyer	Jennifer Kelinrichertt	Martin Kerrigan	Kathleen King
June Katzmarek	Luke Keller	John Kesich	Susan King
Barry Kaufman	Dorinda Kelley	Liz Kessler	Khalil Kinge
Jonathan Kaufman Scher	Marci Kelley	Trish Ketelsen	Sheila Kinkhead
Katie Kaulbach	Doreen Kelley	Astrid Keup	Ma Kinnaman
Eve Kavanagh	Thomas Kelly	Nathalie Khodr	Jeannie Kinnaman
Pawel Kawalkowski	Diane Kelly	Carolyn Kibbe	Ann Kinney
Sasha Kay	Lara Kelly	Amanda Kidari	Audrey Kipler
Deborah Kearns	Elizabeth Kelson	Jessika Kiel	Allysyn Kiplinger
Aliza Keddem	Jill Kempf	Sean Kilpatrick	Jade Kiran
Chris Keefe	Eden Kennan	John Kilroy	Christopher Kirchwey
Lori Kegler	Eden Kennan	Jeanette Kim	James Kirk
John Keiser	Eden Kennan	Kristi Kimmel	Donald Kirker
Jennifer Keitz	Sara I Kennedy	Howard King	Jim Kirkpatrick

Mary Ann Kirsling	Basey Klopp	Jeff Komisarof	Lea Kotlinski
Kerry Kittrell	Peter Klosterman	Paul Komishock	Helen Koules
Pamela Kjono	Frank Klug	Eddie Konczal	Thomas Koven
Robin Kladke	Nicole Knauber	Joseph Konig	Marta Kowalska
David Klass	Suzanne Knight	Gail Konopacki	T Kowitt
Natalie Klein	Donna Knipp	Sharon Koogler	Gail Koza
Julie Kleinert	Nadia Knoblock	Heidrun Kordholste-Nikander	Michelle Kraatz
Andrea Kleinhenz	Deb Kobres	Jan Koreneef	Manuela Kraft
Ken Klemke	Jean Kockinos	Scott Korman	Bobbie Kraft
Leona Klerer	Michele Kofler	Martin Kornbluh	Brian Krahmer
Deanna Kline	Rhonda Kohl	Naomi Korner	Ruth Kransow
Deanna Kline	Amala Kohler	Jacques Korte Leccia	Lawrence Krantz
Mona Kling	Steven Kokol	Michelle Korte Leccia	Ben Kraus
Rachel Klingberg	Kenneth Kolanko	Sven Koschinski	Marion Kraus
Stephanie Klingele	Karen Kolling	Dawn Kosec	Laura Krause
Ron Klobberdanz	Kathy Koloze	Kim Kost	Audrey Krause

Dolores Kraut	Brian Kummer	Denise Laffer	Deborah Lancman
Joseph Kress	Patricia Kummer	David J Lafond	Martha Land
Jessica Krick	Katrin Kuriger	Kerry Lafromboise	John Landau
Camille Krieg	Mara Kurtz	Brad Lagorio	Louis Landesman
Kenneth Kris	Lisa Kurtz	Brad Lagorio	Kathy Landess
Kathy Kroll	Don Kurz	Jared Laiti	Julia Landress
Gretchen Kronk	Adele Kushner	Jessica Lam	Marisa Landsberg
Steve Kroon	Sheri Kuticka	Leticia Lamagna	Lynn Lang
Christine Krumm	Peter Kuttner	Pamela Lamaster-Millett	Chris Lange
Christine Krumm	Robert Kvaas	Judith Lamb	Marlena Lange
Vicki Kruschwitz	David Labarre	Eric Lambart	Catherine Langston
Yasiu Kruszynski	Rachele Laccetti	Jason Lambert	Beth Langston
Kashka Kubzdela	Mercedes Lackey	Larry Lambeth	Martha Lankton
Robert Kuhn	Dale Lacognata	Sharon Lampi	Jim Lansing
Lynne Kuhns	Julie Lacy	Loretta Lamprescht	Marcus Lanskey
E Kulhanek	Ann Lafave	Emily Lancaster	Doris Lapierre

Sharron Laplante	Victor Lawrence	Pauline Lee	Richard Leonard
Drena Lapointe-Meyer	Michael Lawrence	Brenda Lee	Richard Leonard
Rick Laporte	Kathleen Lawrence	Cathryn Lee	Magali Lequent
Mondy Lariz	Ometh Layton	Naomi Lee-Hood	Martina Lerede
Karen Larsen	Joann Laz	Natalie Leekwijck	William Lerner
Brent Larsen	Anne L Lazarus	Anna Lees	Rosa Lerner
Dona Laschiava	James Lazell	Susan Lefler	Ken Lesem
Cal Lash	Luan Le	Lisa Lehman	Barbara Lester
Cassandra Lasher	Becky Le Compte	Tanja Lehmann	Barbara Lester
Brian Laskey	Elizabeth Leaf	Mary Leitch	Lilly Letusick
George Latamore	Mary C Leavitt	Nicole Lemaire	Roger Levin
George Latta	Laurent Leccia	Jeannine Lemay	Sandy Levine
Patricia Lauer	Peg Leclair	Cornelia Lemke	Mary Levitt
Louise Laukhuff	Dennis Ledden	Mary Leno	Cody Levitt
Carole Lavigne	Lynn Ledgerwood	Mary Leon	Andrea Levy
Timothy Lawnicki	Dominique Lee	Daniela Leonard	Deborah Lewellen

Deborah Lewellen	Rc Lindelof	Susan Litt	Catharine London
Jane Lewis	Laurie Lindemulder-Harris	Thomas Littleman	Kevin Long
Mark Lewis	Jens Lindgren	Sandy Liu	Douglas Long
Jerry Lewis	Katie Lindsay	Emily Liu-Elizabeth	Agnes Lontai
Rena Lewis	Johan Lindsjo	Stephanie Llinas	Susanne Loomis
Kimberly Lewis	Bruce Lindstrom	Filipa Lobao	Cindy Loomis
Erma Lewis	Virgene Link	Lynn Locke	Marine Loos
Miiru Lex	Barbara Linn	Kimberly Locke	Chantelle Loper
Wendy Li	Red Lion York	Jennifer Lockett	Cristina Lopez
Alicia Liang	Virginia Lionatto	Vicki Lockwood	Ileana Lopez
Heather Liden	Nancy Lion-Storm	S Logan	Nelly Lopez
Amy Lidle	Rebecca Lippa	Tamara Logan	Hector Lopez
Laura Lieberman	Carol Lipper	Margaret Lohr	Jillian Lopez
Eleanor Liggio	Tracy Lira	Dave Loiselle	Herbert Lord
Christopher Lima	Harbers Lisa	Robert Lombardi	Sandra C Lord
Leslie Limberg	Christopher Lish	Kelly Lombardi	Eric Lorenz

Justin Lotak	Steve Lucas	Lorraine Macartor	Samantha Maffeo
Elizabeth Lotz	Marya Lucca-Thyberg	Angus Macdonald	Marlowe Mager
Werner Lotz	Carol Luce	Manolo Segura Macdonald	Barbara Magin
Alanna Louin	Nicolette Ludolphi	Pat Mace	Kristen Magno
Reeve Love	Paul Luehrmann	Carrie Mack	Tracey Magnus
Michael and Patricia Lovejoy	Jeff Luhrs	Lee Mackenn	Krisztian Magori
Clive Lovelock	Karin Lundkvist	Jessica Macomber	Sinead Maguina
Debb Lovett	Laura Lux-Thompson	Paul Macomber	Jacqueline Mahrley
Sammy Low	Gina Luzzi	Kristyn Macphail	Rebecca Maier
Patsy Lowe	Marcia Lyle	Malcolm Macpherson	Edward Mainwaring
Amanda Lowe	Sandra Lynn	Diann Macrae	Lily Maisky
Candice Lowery	Kelly Lyon	Cinzia Maddalena	Stephanie Malara
Joy Loyd	Ronald Lyons	David Madden	Wendy Malid
Russ Luba	Steve Lyons	Susanne Madden	Aimee Malik
Emily Lubahn	Priscilla M	Richard Madole	Chad Mallett
Diana Lubin	Kristin Maberley	Marianne Maetz	Mary Malloy

Sonja Malmuth	Dennis Marceron	Janice Marshall	Lamar Mason
Ronald Maltz	Rivette Marchand-Hill	Gabrielle Marshall	Barbara Mason
Marie Mandano	Doug Marchel	Nancy Martin	Florence Mason
Michael Mandel	Christina Marcus	Michael Martin	Carolyn Massey
Amy Manganelli	Jack Marden	Russell Martin	Virginia Massey
Natalie Mannering	Ann Maria	Marilyn Martin	Lily Mast
Emily Manning	Veronique Marien	Timothy Martin	Stephen Matera
Beth Manning	Joanne Marino	Franz Martin	Sandra Materi
Bjoern Mannsfeld	Gideon Mark	Yvonne Martin	Anne Mathot
Bjoern Mannsfeld	Leslie Marks	Chris Martin	Thelma Matlin
Vivi Mannuzza	Elise Marks	Martin	Jean Matthews
Anita Manny	Jeremy N Marks	Will Martin	Barbara Matthiessen
Rosa Manriquez	Mary Markus	Keiko Martinez	Tricia Mattiello
Melissa Mantiq	Juliana Marques	Madelon Martinez	Michael Mauer
Jenny and David Mapes	Steve Marsh	Jennifer Martini	Paul May
Matt Maras	Simon Marshall	Isabel Martins	Michele May

Gary Maybank	Jennifer McConnell	Christie McGinn	Ann McMullen
Paul Mayer	Ellen McConnell	Kerry McGorlick	Colleen McMullen
Shannon Mayfield-Chapin	Molly McCormick	Wendy McGowan	Kirk Mcnaught
Angela Mayle	Melanie McCormick	Dave McGowan	Sarah Mcnaull
Lisa Mazzola	Hazel McCoy	Bridget McGraw	Jacob Mcneal
Terry Mcananey	Jan Mccreary	Sue Mchenry	Norma Mcneill
Maria McBride	William Mccullough	Rosemary Mchugh	Cynthia Mcpeak
Rita McCabe	Michelle Mcdaniel	M McIntosh	Blue Mcright
D Mccaig	Patricia Mcdonald	Malva McIntosh	Lawrence Mctigue
Kira Mccall	Emily Mcdonald	Claire Mckay	Anna Meacham
Mica Mccall	Claude Mcdonald	Nelle Mckay	Adam Mead
Mike Mccampbell	Erin Mcewan	Tracy Mclarnon	William Meade
James Mccarthy	Terri Mcfarland	Derek Mclaughlin	Ernest Medeiros
Chris Mccarty	Michele Mcferran	Matt Mcleod	Kathleen Medina
Melinda Mccomb	Ann McGill	Sharon Mcmenamin	Barry Medlin
Robert Mccombs	Mike McGinn	Kipp Mcmichael	Nancy Meehan

Don Meehan	Carol Merkley	David Miliotis	Dianne Miller
Dan Meier	Juliha Merljak	Lenard Milish	Beverly Millert
Ray Meinberg	Rodney Merrill	Lorraine Millard	Saralaine Millet
Margit Meissner-Jackson	John Meserve	Tracy Millard	John Milton
Thomas Meister	Gerald Meslar	Jennifer Miller	Steve Mineck
Martha Meitch	Beth Mestman	Howard Miller	Rev. Curt Miner
David Melcer	Whitney Metz	Charles Miller	Samuel Miner
Dan Melius	Carol Metzger	J Robert Miller	Marija Minic
Jane Mellin	Katherine Metzroth	Lamura Miller	Carol Minkus
Molly Mendez	Kathy Meyer	Tim Miller	Mark Minton
Barbara Mendieta	M S Meyers	Sara Miller	Ginger Mira
Anthony Meoni	Foster Michael	Jacqueline Miller	August Mirabella
Alberto Meotti	Lance Michel	Donald Miller	Sophie Miranda
Michele Mercer	Lee Michelsen	Tanja Miller	Eileen Miron
Michele Mercer	Lee Michelsen	Dianne Miller	Hank Mirsky
Michael Meredith	Joan Milford	Michael Miller	Iryna Mishchuk

John Mitchel	Silvi Moore	Stuart Mork	Rich Moser
Kristy Mitchell	George Moore	Madeline Moroff	Ovadia Moshe
Ken Mitsch	Lydia Morales	Gian Morresi	Pagan Mosher
Marie Mock	James Moran	Sue and John Morris	Paul Moss
Deidre Moderacki	J Moreira	Kathleen Morris	Marjorie Moss
Kathleen Mohning	Gillian Moreland	Florence Morris	Michelle Mote
Catryn Moitoret	Estela Moreno	Alexis Morris	Elena Moutier
Tania Monreal	Denise Morey	Patricia Morrison	Cary Moy
Dean Monroe	Marissa Morgan	Mollie Morrisette	Lisa Moye
Susan Montague	Linda Morgan	Mollie Morrisette	Marcy Moyer
Anthony Montapert	Dan Morgan	Marie Morrissey	Harry Mozen
Deborah Montero	Linda Morgan	Marie Morrissey	Charles Muehlhof
Vinnie Montez	Patricia Morgan	Keir Morse	Greg Mueller
Megan Mooha	Patricia Morgan	Constance Morse	Lindsay Mugglestone
George and Kathy Moore	Audra Moricca	Vincenzo Mortolini	Leon Muhundinov
Joan Moore	Patricia Morimando	Vivianne Mosca-Clark	Enzo Mulas

Prem Mulberry	Bonnie Murphy	Jennifer Myers	Michael Neary
James Mulcare	John Murray	Nadia Mykolayevych	Michael Neary
Timothy Mullen	Cristy Murray	Jaime Nahman	Meibao Nee
Edna Mullen	D Murray	Jean Naples	Jim Neese
Henry Muller	Bobbie Murray	Arlene Naranjo	Grace Neff
Glorian Mulligan	Verona Murray	Karolyn Nartker	Michael Neil
Tara Mulski	Kim Murray	Jonathan Nash	Debbie Neimark
Shirley Muney	Deborah Murray	Raymond Nash	Georgia Neisz
Fernanda Munoz	Emily Musgrave	Heyward Nash	Barbara Nelson
Chris Munton	Monique Musialowski	Maria Nasif	Catherine Nelson
Heather Murawski	Marit Mussche	Yogi Nasser	Cindy Nelson
Dylan Murphy	Mary Mutch	Clark Natwick	Catherine Nelson
Brendan Murphy	Sheryl Myerley	Greg Navarro	Denise Nemeth-Greenleaf
Joy Murphy	Slyvia Myers	Brent Naylor	Cat Neshine
Michelle Murphy	Nathan Myers	Maria Nazzaro	John Nettleton
Daniel Murphy	Elena Myers	Sandra Nealon	Nancy Neumann

Denise Neuzil	Debra Nichols	L Nishimura	Brittanny Norton
Paula Neville	Chris Nicholson	Norbert Nitsch	Vicki Nosal
Dale Newfield	Marie Nickell	James Nitschke	R Noteman
Roberta Newman	Mark Nickell	Shelly Nixon	Jan Novotny
Ricki Newman	Robert Nickerson	Sandra Noah	Lee Nowell
J Newman	Patricia Nickles	J Noble	Susan Noyes
Laurie Newman	Pier Nicoletti	M Noethen	Deb Nudelman
Laurie Newmsn	Pam Niedermayer	Simin Nomani	Raymond Nuesch
Jamie Newsome	Thomas Nieland	Angelina None	K.A. Nunley
Shirley Ney	Antonella Nielsen	Angelina None	C Obert
Carol Ng	Josephine Niemann	Stephen Nong	Aileen O'brien
Phong Nguyen	Moo Niemeyer	Molly Noone	Daniel O'brien
Jill Nicholas	Sue Nightingale	Brian Norris	Oskar & Mathias Obrist
Ambrey Nichols	Michele Nihipali	Alfred North	Kim O'bryan
Kate Nichols	Sheryl Nims	Susan Norton	Ronda O'bryant
William Nichols	Bruna Nin	Pi Norton	Patti O'conner

Rollin Odell	Elmer Ollikkala	Patricia Orlinski	Allison Ostrer
Megan Odle	Justine Olmez	Yaelyn Orozco	Marcia Ostrowski
Deanne O'donnell	Corey Olsen	Yaelyn Orozco	Katherine O'sullivan
Dede O'donnell	Steve Olson	Jane Orr	Jamie Oswald
Caoimhe O'flaherty	Jim Olson	Jane Orr	Sarah Oswald
Ginger Ogburm-Matthews	Hilary Olson	Barbara Orr	Gabriella Otero
Rebecca Oglesby	Jody Olvera	Carol Orshan	Linda Otoole
Rose Ogorzaly	Holly O'mara	Paul Orway	Annmarie O'toole
Lorrie Ogren	Jenny O'neil	Warren Osborn	Michael Ott
Charlie O'keefe	Patrick O'neil	Cheryl Osborn	E. Christopher Ott
Sean O'keefe	Ming Ong	Hannah Osborne	Shelley Ottenbrite
Catherine Okimoto	Ebru Oran	Jessie Osborne	John Otter
Avi Okin	Ciara O'reilly	Karen and Edward Osgood	Fabienne Oubrayrie
Ruth Olafsdottir	Tarryn Orford	Maureen O'shea	Christophe Ouedec
Matthew Oliveira	Vikki Orlando	Saskia Oskam	Tracy Ouellette
Christy Oliver	Lillian Orlando	Julie Ostoich	Zbyslaw Owczarczyk

Anna Owen	Patricia Palko	Jeannie Park	Cheryl Patterson
Marina Owen	Michelle Palladine	Reece Parker	Roni Jo Patterson
Carly Owens	R. Brent Palmer	Amy Parker	Cynthia Patterson
Michele Ozuna	Jason Palmer	Doug and Jan Parker	Susan Pattie
D P	Brittni Palmore	David Parrett	Carol Patton
B P	Pinky Jain Pan	Brandy Parris	Debra Patzer
Joe Pacal	Chris Panayi	Joan Parrish	Melodi Paulsen
David Packham	Rosiris Paniagua	Constance Parry	Michelle Pavcovich
Gail Padalino	Robert Pann	Adina Parsley	Ann Pax
Stephen Paddock	Eleni Papakonstandinou	Jeannie Pascuzzi	Jeff Payne
Georgianne Pagano	John Papandrea	Randall Paske	David Payne
Joel Page	Bruce Papier	Christine Pasmore	Anna Paz
Joel Page	Patrizio Paratelli	John Pasqua	Jared Peace
Cindy Pagliuzza	Jai Parekh	Adam Pastula	Amanda Pearl
Gregory Pais	Charles Parent	Thomas Patterson	Juliet Pearson
Tami Palacky	Anthony Parisi	Dale Patterson	Jerry Peavy

Jim Pech	E Perkins	Jane Pettit	Frederick Pianalto
Barbara Peden	Stefania Perotti	Carlene Petty	Dan Picardi
Bruce and Lana Pedersen	Claire Perricelli	Jamaka Petzak	Eric Pickering
Diane Pekarcik	Carole Perry	Ashlee Peyton	Jeanne Piehl
Dacelle Pekcler	Angela Perstein	Nezka Pfeifer	Jeanne Piehl
Amanda Pekin	Wayne Peters	Christina Pham	Dolores Pieper
Judith Pelletier	Kimberly Peterson	Stu Philips	Allison Pierce
Alan Peltzer	Linda Peterson	Danny Phillips	Patrick Pierce
Nelson Pena	Elaine Peterson	Ed Phillips	Amy Pierre
Kim Pendergrass	Ellen Peterson	Joseph Phillips	Lisa Piner
Elisabeth Penitschka	Andrea Peterson	Joe Phillips	Meryl Pinque
Marsha Penner	Betty Peterson-Wheeler	Stephen Phillips	Janna Piper
Constance Pennington	Chris Petrakis	Lauren Phillips	Shannon Pippin
Greg Perantoni	Linda Petrulias	Damon Phillips	Charlotte Pirch
Iris Pereira	Maryke Petruzzi	Andy Philpot	Maureen Pisani
Rosa Perez	Sue Petteway	Vero Piacentini	Lynn Pitney

Terry Pitt	Tony Policelli	Mariko Powers	Bob Primiano
John Pittenger	Tony Policelli	Maureen Powers	Amy Prisco
Jennifer Place	Alisa Polk	Sandra Powers	John Pritchard
Angela Plagge	Allisa Polk	Douglas Powless	Stephanie Proctor
Marie Plante	Nicole Pollock	Lee Poynor	Thomas Proett
Joel Platt	Lesia Pond	Sydney Pratt	Ana Prohaska
Timothy Platt	Louis Pontillo	Peter Pray	Johnnie Prosperie
Marissa Pleasants	Sarah Pope	Steven Prchal	Donna Provance
Laurel Plester	Robin Poppe	M Preble	Ruth Provost
Malinda Plog	Robin Poppe	Maryanne Preli	Ruth Provost
Brenda Polacca	Angela Porsch	Alexandra Prentiss	Ruth Prpich
Jorie Polainer	Leroy Porter	Gertrude Preston	Mary Pruet
Eric Polczynski	Doris Potter	G Preuss	Nicholas Prychodko
Alice Polesky	Amanda Potter	Michael Price	June Pticher
Alice Polesky	Ashten Powell	Homer Price	Joy Puder
Arthur Polhill	Elena Powers	Mary Price	Barbara Puett

Daniel Puetz	Sarah Rademacher	Dee Randolph	Bobby Reagan
Laken Pugsley	Jeff Radford	Rich Ranieri	Cathy Ream
Judi Pulson	Irene Radke	Tom Ranker	Chris Reamer
Sally Purbrick-Illek	Lisa Rae	Chad Ransom	Gail J Reams
Susan Puscheck	Claire Raffaelli	Patricia Ranstrom	Mark Reback
Adrianne Puza	Miriam Rainville	Lauren Ranz	Denise Redden
Cathy Pyle	Kat Raisky	Connie Raper	D Redman
Jessica Pynn	Marilyn Ralph	Amanda Rask	Sandi Redman
Matthew Quellas	Rosa Ramal	Jamie Rasmussen	Gordon Reed
Fischer Quentin	Bob Ramczyk	Anthony R Rastro	Liz Reed
Nancy Quijano	Jessica Ramirez	Marjorie Rathbone	Kristin Reed
Scott Quinnell	Uberlinda Ramirez	Jeffrey Rattner	Amanda Reed
Anna Marie Quintanilla	Rozanna Ramirez	Nikhil Rau	James Reeder
Karina R	Joann Ramos	Henry Rauchweld	Laraine Reedy
Christina R	Bruce Randall	Henry Rauchweld	Sarah Reese
Angela R	Patricia Randolph	Mary Rausch	Laura Reesor

Christelle Regis	Gail Reutershan	Kristine Richter	Denise Rischel
Stewart Rego	Bruce Revesz	Carolyn Riddle	Patricia Risso
Suan Rego-Ross	Cathy Reynolds	Dale Riehart	Mark Rist
Janet Reid	Peter Reynolds	Dale Riehart	Joanne Rist
Ryan James Reid	Margarite Reynolds	Richard Riger	Joanne Rist
Daniel Reid	Jennifer Rhoads	Katelynn Riggs	Shann and Dennis Ritchie
John Reid	Janet Rhodes	Panagiotis Rigopoulos	Marcia Ritz
Peter Reid	Debra Ricci	Carol Rigrod	Luis Jorge Rivera-Herrera
Ann Reilly	Vittorio Ricci	Callie Riley	Gaetano Rizzi
Eileen Reilly	Kyra Rice	Kelly Riley	Chiara Rizzo
Sheila Reilly	Josh Richard	N Riley	Elaine Rizzo
Gabriele Reinhart	Nancy Richard	Callie Riley	Tutihasi R-Laurraine
Jonathan Reinig	Christine Richards	Ura Rimola	Edward Roach
David Reisman	Sonia Richart	Ami Ringler	Shay Roalson
Michele Remenar	Kasia Richer-Juraszek	David Rink	William Roberson
Eugene Rencher	Lonna Richmond	Fred Rinne	Tamila Roberson

Cynthia Roberson	Sandra Rocha	Jelica Roland	Deanna Rosen
Claude Robert	Jessica Rocheleau	Jelica Roland	Stephen Rosenblum
J Roberts	Ingrid Rochester	Jelica Roland	Henry Rosenfeld
Ashley Roberts	Karen Roddy	Frebet Rollande	Lynn Rosenfield
John Mark Robertson	Patricia Rodgers	Evan Roman	Deb Rosengrant
Mark Robertson	Nick Rodin	Azalea Roman	Maurice Rosenstrauss
Myles Robertson	Larissa Rodriguez	Denise Romesburg	Jessie Rosenthal
Steve Robey	Michelle Rodriguez	Geraldine Rondeau	Wilson Ross
Arlene Robins	Ingrid Roed	Reeta Roo	Kathleen Ross
Jack Robins	Megan Roemer	Charlene Root	Michael Rotcher
Janet Robinson	Dirk Rogers	Keller Rosa	Deborah Roth
Terry Robinson	William Rogers	Kathryn Rose	Sue Rothauser
Helen Robinson	Lydia Rogers	Rebecca Rose	Wolfgang Rouble
Kristofer Robison	Karen Rogers	Suzanne Rosen	Gregory Rouse
David Rocco	David Rogers	Barbara Rosen	Karline Rousseau
Sandra Rocha	John Rokas	Deanna Rosen	John Rowland

Joe Roy	O Ruiz	Yasmine Saad	Jean Saja
D.A. Roy	Juliann Rule	Wilson Saavedra	Mark Salamon
Peter Rubin	Paul Runion	Frank Sabatini	Rocio Salazar
Jo Rubin	Cathy Rupert	Dawn Sabin	Lisa Salazar
Bill Rubin	Carrell Rush	Falisha Sachon	Shannon Saldana
Lisa Rubin	Sandra Russell	Deb Saeger	Elaine Saldivar
Kenneth Ruby	Ferny Russo	Carmen Saenz-Harris	James Saley
Frederick Ruch	Vanessa Russo	Zandra Saez	Ana Salinas
West Ruck	Monica Russo	Melody Safken	Christopher Salinas
Judith Rucker	Deborah Rutecki	Rebecca Safron	Rastic Samela
David Rudin	Ben Ruwe	Allison Saft	Rastic Samela
Susan Rudnicki	Veronica Ruzzo	Nancy Sagatelian	Stephen Sample
Mytzi Rudolph	Rebecca Ryan	Janet Sage	Meredith Sampson
Candice Rudolph	Bonnie Ryan	Ed Sahagian-Allsopp	Noahdm Sanchez
Cornelia Rueckert	Patrick Ryel	Suzanne Sahi	Natalie Sanchez
Thomas Ruedas	Kevin Ryle	Karin Sahlman	Mary Lee Sander

Vicky Sanders	Kathryn Sawyer	Steve Schildwachter	Joann Schneider
Jeffrey Sanders	Jennifer Sawyer	Steve Schildwatcher	Allyn Schneider
Ellen Sanders	Carol Sawyers	Noah Schlager	Robyn Schnellenberger
Dan Sandman	Frances Saykaly	Susan Schlessinger	Troy Schreiber
Mariana Sandulescu	Lina Sbitany	Glenn Schlippert	Natalie Schrey
Patricia Sanitate	Robert Scates	Carol Schloo-Wright	Sara Schroeder
Sawatdee Sanlavun	Diane Schabitzer	E.S. Schloss	Cindy Schultz
Susan Sansone	Terry Schaedig	Olivia Schlosser	Amy Schumacher
Saskia Santos	Sarah Schaefer	Olivia Schlosser	Aaron Schuman
Todd Sargent	Matthe Schaut	Patrick Schmahl	Doris Schumann
Robert Sargent	Judith Schenck	Ulla Schmid	Whitney Schutt
Alixine Sasonoff	Linda Schermer	Roger Schmidt	Bettina Schwan
Sherry Saunders	Frederike Scherr	Justin Schmidt	Joyce Schwartz
Jennifer Savage	Paul Schiappa	Carolyn Schmitz	Jack Schwartz
Mary Savoia	Matt Schikore	Jo Ann Schneider	Alana Schwartz
Rosemarie Sawdon	Nicole Schildcrout	Ken Schneider	Jenny Schwartzberg

Cheryl Scott	Barbara Searles	Luanne Serrato	Lisa Shepard
Erik Scott	Laroy and Mary Seaver	Barry Seth	Laura Shepard
Frank Scott	Karyn Sederberg	Robert Sewekow	Sarena Sheridan
Conor Brian Scott	Bob Segal	Roxann Shadrick	Robert Sherman
Conor Scott	Irina Seifer	Harriet Shalat	Richard Sherman
Kenna Scott	Ann Seip	Elsy Shallman	David Sherman
Myron Scott	Spencer Selander	Nancy Shannon	Richard Sherman
Richard Scott	Jennifer Sellers	Holly Sharps	Dan Sherwood
Pamela Scoville	Sarah Selph	Diane Shaughnessy	Dean Sherwood
Denee Scribner	Donna Selquist	Sara Shaw	Aron Shevis
Tena Scruggs	Donna Selquist	S Shaw	Aron Shevis
Amanda Scuder	Rob Seltzer	Robin Sheaff	Aron Shevis
Amanda Scuder	Laura Semboli	Steve Sheehy	Theresa Shiels
Joan Scurran	The Sennetts	Gabirel Sheets	John Shiffler
David Seaborg	Mark Sentesy	Krista Shepard	Kathy Shimata
Susan Seager	Debbie Sequichie-Kerchee	Richard Shepard	Michele Shimizu

Bob Shippee	Victor Siemon	Sally Simpson	Suey Sivula
Judy Shively	Victor Siemon	Eric Simpson	Edwin Skinner
Laina Shockley	Liz Sigel	Rusty Simpson	Edwin Skinner
Elizabeth Shoemaker	Sheila Silan	Eric Simpson	Colleen Skjerven
Rose Shortland	Steven Silber	Linda Simpson	Barb Skoog
Herbert Shroyer	Michelle Silene	Millicent Sims	Lori Slaney
H Shukla	Welthy Silva	Paul Sinacore	Peter Slattery
Heidi Shuler	Margaret Silver	Darcie Sinciline	Louise Slattery
Marguerite Shuster	Ronald Silver	Evelyn Singer	Stephen Sleeper
Janina Sibeke	Ron Silver	D Singer	Beth Slikas
Reiner Sibeke	Kathy Silvey	Jonathon Singleton	Adam Sloan
Maja Sidzinska	George Simich	William Sinton	Karen Slote
Johannes Siebke	Julian Siminski	Alexandra Sipiora	Bill Slowinski
Sonja Siebke	Steve Simmons	Alexandra Sipiora	Gretchen Small
Wayne Sieck	Carol Simon	Katie Sirk	Gretchen Small
Marilyn Sieck	Dana Simone-Kurtz	Torunn Sivesind	Raymond Smart

Mark Smeltz	Patricia Smith	Kristina Solheim	Daniel Soulas
Tim Smerken	Glen Smith	Emilia Soltis	Amanda Sousa
Paul Smith	Wayne Smith	Joseph Soltis	Margaret Southwell
Shirley Smith	Sharon Smolinski	Jeff Somers	Michael Souza
Susan Smith	Judith Smtih	Anthony Somkin	Rejane Souza
Jennifer Smith	William Snavely	Cristina Sommaruga	Melinda Sowder
Greg Smith	Will Snow	Alexander Sonneborn	Angelo Spano
Sherry Smith	Will Snow	Jules Sonntag	Linda Spanski
David Smith	Vince Snowberger	Patricia Soper-Oakes	Craig Sparks
Charlene Smith	Patricia Snowden	Ann-Marie Soper-O'rourke	Robert Sparks
Julie Smith	Robert Snyder	Dino Sorbello	Shauna Sparlin
Edwina Smith	Amy Snyder	Jacquelyn Sorby	Kathryn Spence
Eric Smith	Alla Sobel	Susana Sorin	Susan Spencer
Holly Smith	Diane Soddy	Susanna Sorin	Constance Spenger
Christopher Smith	Karina Soerensen	Mark Sossoman	Barry Spielvogel
Frank Smith	Judy Soffler	Kay Souissi	Stephanie Spiers

Gunther Spinnler	Lesley Stansfield	Terran Steinberg	Candace Stolleu
Ann Spooner	Jessica Stapleton	Carol Steinhart	Joseph Stomato
Richard Spotts	Mary Stark	Nancy Stejskal	William Stone
A Sprakelaar	Allen Starkel	Robert Stennett	Peter Stone
George Squires	Carrie Staton	Ron Stepchuk	Eric Stone
Ena Sroat	David Stea	Ann Stephens	Mandy Stone
Dora St	Gerry Stearns	Hagit Sternfeld	Michelle Stone
R St Angelo	Cheryle Steele	Wilford Stevens	Christine Stoudnor
Mark St. Martin	Heather Steele	John M Stewart	Jim Strachan
Charlotte Stahl	Karen Steele	Adam Stipano	Darren Strain
Jennifer Staiger	Yoyi Steele	Sandra Stock	Nancy Stratford
Kera Stallard	Heidi Steffy	Derek Stockdale	Nicole Strathman
Lauren Stamatis	Markus Stein	Ann Stocker	Lydia Straus-Edwards
Claire Stancek	Eric Stein	Sharon Stockman	Lew Stringer
Steven Standard	Eric Stein	Ronna Stoddard	Deborah Strohmayer
Lesley Stansfield	Jack Steinberg	Luben Stoilov	David Strong

Lynnda Strong	Matt Summey	Marianne Szalega	Scot Tallamdge
Tim Strong	Brent Supperstein	Theresa Szpila	Leita Tallman
Ken Strothkamp	Sandra Sussillo	Kamila Szuberla	Jie Wei Tan
Thomas Struhsaker	Erin Suyehara	Ed Szymanski	Frances Tan
Patrick Studt	Judith Swain	Michael T	Junri Tann
Merlene Stuerzer-Rhodes	Rebecca Swan	Kenneth Tabachnick	Ralph Tanner
Sandy Stuhaan	Stephanie Sweas	Linda Tabbert	Sadira Tash
Robert Stweart	Peter Sweeny	Vincent Tabor	Julia Tatara
Johnny Su	Alexandra Sweitzer	Jan Tache	Andrew Tate
Juan Suarez	Jay and Robert Swenson-Butler	Barbara Tacker	Laurel E Tate
D Suchy	Arthur Swers	Carol Taggart	Felicia Tawil
Laurie Sudol	Judith Swink	Alese Tait	Leslie Tawnamaia
Robert Sullivan	Lesley Swinton	Amy Tajdari	Juia Tawyea
Gayle Sullivang	Mary Switlik	Brenda Takowski	Catherine Tayler-Houle
Rebecca Summer	Matthew Swyers	Kareem Talhouni	J. Holley Taylor
Donna Summers	Daniel Sylvester	Rob Talkington	Llew Taylor

Houston Taylor	Barbara Tetro	John Thomas	Kelly Thompson-Laperle
Bruce Taylor	Donna Cay Tharpe	Donna Thomas	Gary Thoms
Deborah Taylor	Tiffany Theden	Christine Thomas	Amy Thorne
Regi Teasley	Donna Thelander	James Thompson	Leonard Thornton
Terry Tedesco-Kerrick	Michalis Theodosiou	Thomas Thompson	Jean Thorsen
Jessica Tellez	Brynna Thigpen	Linda Thompson	Liz Threlkeld
Michele Temple	Susan Thing	Carol Thompson	Susan Thuraiatnam
Kathleen Templeton	Tucker Thomas	Helen Thompson	Roberta Thurmond
Harriet Temps	Carrie Thomas	Barton Thompson	Daniel Tiarks
Tanya Teneyuque	Jim Thomas	Susan Thompson	Eliot Tigerlily
Simon Teolis	Kris Thomas	John Thompson	Gina Tinelli
Marilyn Teplow	Sara Thomas	Lawrence Thompson	John Tissavary
Walter Terrell	Simon Thomas	Helen Thompson	Theresa Titone
Michael Terry	Jim Thomas	Renae Thompson	Bill Tkach
Christine Terry	E Thomas	Brittany Thompson	Dan Tobin
Chiara Testi	Ben Thomas	Zarah Thompson-Jacobs	Karl Tollefson

Michael Tomlinson	Scott Troup	Evette Twyford	Anne Valdez
Jeff Topping	Hal Trufan	Taner Ucar	Rio Valencia
Tatiana Torres	Sharon Trujillo	Aaron Ucko	Karen Valentine
Ashley Tose	Joel Trupin	Lori Ugolik	David Valentino
Larry Toussaint	Elena Tsikala	Gene Ulmer	Brittany Valentino
Steve Trammell	Chris Tucker	Betsy Ungeheier	Jose Valle
Gene Trapp	Barbara Tucker	Unger	Cheryl Vallone
Lj Travers	Karen Tucker	Unger	Emily Van Alyne
Annabelle Travis	Mr. and Mrs. Tulk	Angie Unruh	Michael Van Atta
Carol Tredo	Jan Tullis	Ellie Unum	Marijke Van Bommel
Katie Tremaine	Lawrence Turk	Fed Up	Suzanna Van Der Voot
Robin Tremblay-Costello	Patricia Turk	Heide Uppgaard	Maria Van Dingenen
Cassandra Treppeda	Jeris Turner	Marilee Urban	Valerie Van Isler
Elisabeth Trice	Pam Turner	Rachel Usher	Mathias Van Thiel
Lori Triggs	Ralph Tusher	Lucilla Vacondio	Debra Van Way
Tracy Troth	Lois Tutino	Carole Vajames	Lisa Vana

Denise Vandermeer	Nancy Verlinde	Delia Volpi	J Walby
Barbara Vandermolen	Sakura Vesely	Robert Von Giebel	Gilbert Wald
Mike Vanlandingham	John Viacrucis	Robert Von Giebel	Aloysius Wald
Serge Vantalon	Margaret Vicario	Dieter Von Lehsten	Jason Waldo
John Varga	Doris Vician	Nicole Votta	Nancy Walker
Roberto Vargas	Josefina Vidal	Pamela Vouroscallahan	Jason Walker
Lynda Varner	Chasti Viljoen	Paul Voytas	Joan Walker
Sheri Varner-Munt	Mary Lyn Villaume	Rebecca Waddell	Craig Walker
Karen Vasily	Daphne Villeneuve	Julie Wade	Lynn Walker
Ileana Vasquez	Joseph Vincent	Marie Wadman	Carmen Walker
Sonia Vasquez	Oliver Virbickas	Andrew Wadsworth	Christopher Walker
Roger Vaughan	Jennifer Visconti	Ina Wagner	David Walker
Glen Venezio	Minet Visser	Mare Wahosi	Nancy Wall
Aspen Ventano	Anca Vlasopolos	Bryce Waite	Kathy Wall
Filippo Venturi	Beth Vollmar	Monique Waitzer	Jonathan Wallace
Al Verdini	Denise Vollmar	Jeriene Walberg	Aleta Wallach

Ann Waller	Marilyn Wargo	Weston Watts Jr.	Robert Weigl
Ann Waller	Tom Warhol	Leonard Way	Emily Weil
Marilyn Waltasti	Christopher Warneke	Randall Wayne	Krystal Weilage
Paulette Walter	Laura Warner	Susan Wayne	Sherry Weiland
Sandra Walters	Deborah Warren	James Wayrynen	Robert Weingart
Betty Walters	Ronald Wasdin	Jan Weaver	Diane Weinstein
Wendy Walters	Melina Washington	Joan Weaver	Elyette Weinstein
Hilde Waltman	William Waters	Teri Webb	Mirada Weinstein
Donald Waltman	Pamela Waterworth	Don Webb	Joseph Weinstein
Marcia Walton	Sarah Waterworth	Maryalice Webb	Jennifer Weishaar
Francis Wanderlich	Rebeccah Waterworth	Marissa Weber	Garry Weisman
Ruby Wang	Billie Watkins	Marc Weber	Tali Weiss
Lonnie Ward	Anita Watkins	Melanie Weberg	Laura Weissman
Barbara Ward	Teckla Wattman	Daniel Webster	Russell Weisz
Debra Ware	Elizabeth Watts	Mandy Weeks	Stephen Weitz
Cindy Wargo	Susan Watts	Cheryl Weiden	Joanna Welch

Jennifer Wellings	Kim Wheeler	Sean Wickhem	Deborah Wilkes
Susan Wells	Dorothy Wheeler	Nancy Widman	Michelle Wilkes
R Wells	Mike Wheeler	Sarah Wiebenson	Raven Wilkins
Daniel Wells	Susan Whipple	Katharine Wiencke	Sarah Wilkinson
Shari Welsh	Debbie White	Crystal Wiener	James Willer
John Welton	Dawn White	Wendy Wiener	Jennifer Willett
Kirsten Wert	Ramey White	Daniel Wiese	David Williams
C Wesley	Sue White	Jo Wiest	Jesse Williams
Ginger Westerman	Ann White	Sunni Wigand	Terrie Williams
Jarian Westfall	Ae White	Richard Wightman	Rj Williams
Ricki Westmark	Kat White	Lynn Wilbur	Carla Williams
Glen Wetzel	Brandi Whitecloud	Klaus Wilde	Alicia Williams
Christine Wetzel	Lois Whitley	Kimberly Wiley	Clyde Williams
Lisa Whalen	Gail Whitten	April Wilk	Robert Williams
Marsha Wheaton	Karen Wible	Patricia Wilkens	Danna Williams
Matthew Wheeler	Jodi Wick	Lisa Wilkes	Lara Williams

Emily Williams	Liz Wilton	Rachel Wolf	Rachel Woodward
Davina Williams	Anders Wilzen	Wesley Wolf	Reba Worden
Catherine Williams	Sarah Winblad	Darlene Wolf	David Worley
Scott Williamson	D Winchester	David Wolf	Claudia Wornum
Lisa Williamson	Bobbijo Winfrey	Kathleen Wolfe	Kari Wouk
Maria Williamson	Lee Winslow	Sharon Wolfe	Cp Wren
Olivia Willke	Martha Winsten	Jimmie Wolfe	Shawn Wright
Judith Willoughby	Kim Winter	Ken Wong	Donald Wright
Genevieve Willson	Eva Winters	Patrick Wood	Chadwick Wright
Peter Wilsnack	George Winters	Barbara Wood	Susan Wrightsman
Jane Wilson	Harley Wiseman	Margaret Wood	William Wukitz
Jane Wilson	Ann Wiseman	Larry Wood	Aubery Wulfsohn
Mathew Wilson	Harley J Wiseman	Sandra Woodall	Loralie Wyant
Thomas Wilson	Bianca Wittkowski	Stephen Woodard	Rowena Wyckoff
Ken Wilson	Sandy Woiak	Lisa Woodring	Mike Wygant
Laurie Wilson-Bell	Nikki Wojtalik	James Woods	Unni Wyller

Diane Wynne	Brenda Yu	Daintrie Zega	Carlo Zucchi
Frank Wyse	Katrina Yurenka	Lora Zeis	Marguery Zucker
L Yaco	Alessandro Zabini	Sandy Zelasko	Barry Zuckerman
Paul Yannicosta	Jordan Zachritz	Linda Zent	Rachel Zuercher
Jim Yarbrough	Jordan Zachritz	Stephen Zerefos	Andrew Zugay
Dennis Yee	James Zagray	Paula Zerzan	Julio Zumaran
Fenia Yfandi	Guy Zahller	Shannin Zevian	Graciela Zumaran
Jain Young	Jacques Zakin	Barbara Zibordi	Marie Zwicker
Derek Young	Shari Zaloski	Jon Zielinski	Patricia Zylus
Iain Young	Marta Zamora	R. Zierikzee	
Robert Young	Pedro Zapata	C Ziffer	
Cher Young	Donna Zappacosta	Tracey Zimmerman	
Charles Young	Lisa Zarafonetis	Paulette Zimmerman	
Richard Young	Natalie Zarchin	Ran Zirasri	
Charles Younger	Joan Zawaski	Sandy Zouzaneas	
Lawrence Yox	George Zbiegien	Carlo Zucchi	